

University of Dundee

DOCTOR OF PHILOSOPHY

"Strategic Alliances in the Energy Sector"

Understanding performance from the perspective of process theories of change

Figueroa Gallardo, Joaquin Rafael

Award date:
2015

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

**‘Strategic Alliances in the Energy Sector’
Understanding performance from the perspective of process theories of change**

**Joaquin Rafael Figueroa Gallardo
Doctor of Philosophy CEPMLP**

**University of Dundee
December 2015**

TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF TABLES	vi
LIST OF FIGURES	viii
ABBREVIATIONS	x
AKNOWLEDGEMENTS	xi
ABSTRACT	xiii
Chapter 1 ‘INTRODUCTION’	1
Background	1
Context for strategic alliances in the energy sector	2
Research problem	5
Conceptual approach	6
Methodology and Methods approach	8
Thesis outline	9
Conclusions	11
Chapter 2 ‘CREATING, MAINTAINING AND DISRUPTING STRATEGIC ALLIANCES: A LITERATURE REVIEW’	12
Introduction	12
Towards a Systematic Literature Review	12
Literature Review on Strategic Alliances	13
Failure rate of Strategic Alliances	13
Reasons for failure rates	14
Themes raised in previous research into strategic alliances	16
Definition of Strategic Alliances	19
Types of Strategic Alliances	21
Motives for the Formation of Strategic Alliances	27
Theoretical explanations of motives for entering strategic alliances	28
Stages of Strategic Alliances	36
Considerations during the process	42
Partner selection	42
Governance Design	44
Implementation and Management	44
Performance evaluation	45
Performance of Strategic Alliances	45
Definition of performance	47
The Measurement of Performance	48
Alliance Portfolio	54
Gaps and opportunities in research	56
Filling the gap	58

Conclusions	59
Chapter 3 ‘METHODOLOGY AND METHODS’	61
Introduction	61
Research design	61
Research questions	63
Research strategies	64
Research paradigm	69
Concepts, Theories, Hypothesis and Models	72
Concepts	73
Theories	76
Hypotheses	76
Models	77
Data Types, Forms and Sources	79
Selection from Data Sources	79
Data Collection and Timing	83
Data Reduction and Analysis	84
Ethics	87
Conclusions	88
Chapter 4 ‘FINDINGS – CONCEPT & PROCESS’	90
Introduction	90
Concept of Strategic Alliances	91
Meaning of Strategic Alliances	91
Broad Term & Boundaries	92
Parties, objectives, alignment, benefits & competitive advantage	93
Strategic component	95
Metaphor of marriage	95
Concept and measurement of performance	96
Types of Strategic Alliances	98
Various types & different levels	98
Motives	100
Complementary	101
Access	102
Strategic	103
Risks and Capital	104
Positive and negative motives	105
Value chain	106
Process in Strategic Alliances	109
Decision to enter a strategic alliance	109
Business options	109
Strategic alliance process	110
Reviewing the strategy	111
A Top-down process	113
At the Division level	114
A more informal process	116
Considerations	117

Partner selection	120
Initial steps in the selection	120
Context for partner selection	121
Characteristics of a partner	123
Considerations for partner selection	126
Portfolio	128
Strategies	128
Tools	131
Organisation	133
Conclusions	135
 Chapter 5 ‘FINDINGS – PERFORMANCE: MEASUREMENT, PROBLEMS, RISKS, CRITICAL FACTORS, FAILURE & SUCCESS’	138
Introduction	138
Measurement of Performance in Strategic Alliances	139
Inputs for measuring performance	139
Considerations on measuring performance	140
Metrics for performance	142
Assessment of Strategic Alliances	144
Problems, Critical Factors, Risks, Failure and Success of Strategic Alliances	147
Partner	148
Partner selection	148
Partner’s technical and financial capabilities	150
Issues related with vested interests	152
Benefits of partnering	153
The complexity of partnering	154
Win-win mind-set in partnering	155
Alignment	156
Differences in interest, objectives and expectations	157
Alignment and success	159
Change	160
Change in expectations, interest and objectives	161
Change and perception of failure	163
Change and markets	163
The complexity of change and need for Executive endorsement	164
Exit	166
Legal-Regulatory problems and risks (Technology, intellectual property, anti-trust and competition law)	170
Technology and intellectual property issues	170
Antitrust and competition law issues	173
Culture	175
Different organisational cultures	175
Dealing with cultural issues	176
Culture and success	177
Clarity	178

Clarity in objectives and benefits	178
Clarity critical for success	179
Stakeholders	180
Trust	181
Leadership	183
Conclusions	184
Chapter 6 ‘FINDINGS-INFLUENCE & PROSPECTS’	188
Introduction	188
Influence	189
External sources of influence	189
Role of the Government and Market’s configuration	190
Legal and Regulatory constraints	192
Political Constraints	193
Culture as a constraint	194
Other Stakeholders. Communities and Financial institutions	194
Executives & Managers’ Influence	196
Dilemma of interest	196
Degree of freedom	201
Executives’ role	203
Skills of the right people	207
Prospects for the future of strategic alliances	210
Scenarios	211
Motives	215
The search for complementarity & the risk factor	215
Technology-Access to Market	216
Strategic-Market-Technology	217
Culture-Market-Regulation	217
Risk	218
The herd effect	218
Challenges	219
Cultural - Financial	219
Technological	219
Change	220
Stakeholders - Communities	221
Economic, Political and Legal	221
Conclusions	223
Chapter 7 ‘DISCUSSION’	225
Introduction	225
Research purpose	225
Summary of Key Findings	226
Findings and existing literature	234
Concept of Strategic Alliances	235
Meaning	235
Types	236
Motives	237

Process of Strategic Alliances	239
Decision to enter a strategic alliance	239
Partner selection	240
Portfolio	241
Performance	242
Measurement	242
Problems, risks, critical factors, failure and success	243
Partner related issues	244
Alignment	246
Change	248
Exit	251
Legal-Regulatory problems and risks	251
Culture	252
Clarity	253
Stakeholders	253
Trust	254
Leadership	254
Influence	254
External	255
Internal (Executives & Managers)	256
Skills	257
Prospects for the future of strategic alliances	257
Scenarios, motives and challenges	257
Contribution	258
Contribution to theory	260
Contribution to practice	260
Conceptual holistic dynamic multi-perspective process model of strategic alliances	261
Limitations and further research	265
Limitations	265
Further Research	266
Conclusions	267
Chapter 8 ‘CONCLUSIONS’	270
REFERENCES	275
APPENDICES	286

LIST OF TABLES

Chapter 2

2-1 Failure rates	16
2-2 Previous research identified by Gomes (2014)	17
2-3 Common types of strategic alliances	23
2-4 Theories of motives for forming strategic alliances	28
2-5 Classification of motives according to different theories	34
2-6 Models of alliance in the literature	37

Chapter 3

3-1 Ontological and epistemological assumptions	65
3-2 Normal combinations of ontological and epistemological assumptions	67
3-3 The logic of four research strategies	67
3-4 Comparison of four research philosophies in business and management research	70
3-5 Conceptual traditions and research strategies	73
3-6 Research strategies, theory and models	77
3-7 Demographics of participants	81
3-8 Quantitative and Qualitative researchers' concerns	84

Chapter 4

4-1 Strategic Alliance: a broad term and boundaries	92
4-2 Parties, objectives, alignment, benefits & competitive advantage	93
4-3 Strategic component	95
4-4 Marriage, temporal and duration	96
4-5 Duration of alliance	96
4-6 Considerations for types of strategic alliances	99
4-7 Complementary	101
4-8 Access	102
4-9 Strategic motives	109
4-10 Risks & Capital	104
4-11 Positive and negative motives	105
4-12 Motives in value chain	107
4-13 Context for partner selection	122
4-14 Characteristics of a partner	123
4-15 Considerations for partner selection	126

Chapter 5

5-1 Inputs for performance	140
5-2 Considerations on measuring performance	141
5-3 Metrics for performance	142
5-4 Assessment of strategic alliances	145
5-5 Partner selection	148
5-6 Partner's capabilities	151
5-7 Vested interests	152

5-8 The benefits of partnering	153
5-9 The complexity of partnering	155
5-10 Difference in interest, objectives, priorities and expectations	157
5-11 Alignment and success	159
5-12 Change in expectations, interests and objectives	161
5-13 Change and perception of failure	163
5-14 Change and markets	164
5-15 Complexity of change and need for endorsement	165
5-16 Exit issues and strategies	167
5-17 Technology and intellectual property issues	170
5-18 Antitrust and competition law issues	173
5-19 Different organisational cultures	175
5-20 Dealing with cultural issues	176
5-21 Culture and success	177
5-22 Clarity in objectives and benefits	179
5-23 Clarity critical for success	179
5-24 Stakeholders	180
5-25 Trust	181
5-26 Leadership	183
 Chapter 7	
7-1 Key findings of the research	227
7-2 Motives in findings and theoretical fit	237
7-3 Theories & approaches of strategic alliances in the literature	264

LIST OF FIGURES

Chapter 1

1-1 Complexity of strategic alliances	6
1-2 Multi-perspective conventional model for strategic alliances	7

Chapter 2

2-1 Strategic alliances among partners	23
2-2 Types of strategic alliances	25
2-3 Stages in strategic alliances	40
2-4 Key success factors	41
2-5 Stages of alliances revisited	42
2-6 Input-Output continuum	50

Chapter 3

3-1 Research design framework	62
3-2 Research questions – the development process	63
3-3 Concepts of interest and the conventional model of strategic alliances	78
3-4 Five general themes for data analysis	87

Chapter 4

4-1 Structure of chapter 4	91
4-2 Broad term & boundaries	93
4-3 Parties, objectives, alignment & competitive advantage	95
4-4 Meaning of strategic alliance	97
4-5 Types of strategic alliances	100
4-6 Complementary motives	102
4-7 Motives of access	103
4-8 Strategic motives	104
4-9 Risks and capital motives	105
4-10 Positive and negative motives	106
4-11 Value chain motives	107
4-12 Motives for strategic alliances	108
4-13 Business options	110
4-14 Strategic alliance process	111
4-15 Strategy	112
4-16 Top down process	114
4-17 Division level	116
4-18 Informal process	117
4-19 Entering into strategic alliances	119
4-20 Strategic alliance process	120
4-21 Initial steps	121
4-22 Context for partner selection	123
4-23 Characteristics of a partner	126
4-24 Considerations for partner selection	127

4-25 Partner selection	128
4-26 Portfolio strategies	131
4-27 Portfolio tools and challenges	132
4-28 Portfolio organisations and challenges	134
4-29 Portfolio management of strategic alliances	134
 Chapter 5	
5-1 Structure of Chapter 5	139
5-2 Measurement of performance	139
5-3 Findings of measurement	146
5-4 Process of analysis, problems, critical factors, risks, failure and success	147
5-5 Summary of findings of partner	156
5-6 Summary of findings of alignment	160
5-7 Summary of findings of change	166
5-8 Summary of exit findings	169
5-9 Summary of findings of legal and regulatory risks	174
5-10 Summary of findings of culture	178
5-11 Summary of findings of clarity	180
5-12 Summary of findings of stakeholders	181
5-13 Summary of findings of trust	182
5-14 Summary of findings of leadership	184
 Chapter 6	
6-1 Structure of Chapter 6	189
6-2 Categories of external sources of influence	190
6-3 External sources of influence	195
6-4 Categories of Executives' & managers' influence	196
6-5 Executives & managers' influence	206
6-6 Skills of the right people	210
6-7 Categories of prospects	211
6-8 Prospects of strategic alliances	222
 Chapter 7	
7-1 Structure of section findings and current research	235
7-2 Structure of findings of problems, risks, critical factors, failure and success	244
7-3 Theoretical Contribution	259
7-4 Conceptual holistic dynamic multi-perspective process model of strategic alliances	262
7-5 Expanded conceptual holistic dynamic multi-perspective process model of strategic alliances	263

ABBREVIATIONS

- CADQAS: Computer Aided Qualitative Data Analysis Software
- CAR: Cumulative Abnormal Return
- IOC: International Oil Company
- JV: Joint Venture
- MNC: Multinational Companies
- NOC: National Oil Company
- NOCs: National Oil Companies
- SA: Strategic Alliance
- SAs: Strategic Alliances
- USA: United States of America

*Note- Headings and subheadings are presented in the American Psychological Association style.

ACKNOWLEDGEMENTS

I would like to thank to Professor Graeme Martin and Doctor Ian Robson, my research supervisors, for their guidance, support and helpful critique.

I would also like to express my deep gratitude to Petroleos Mexicanos (PEMEX) for their sponsorship in the development of this PhD.

A special note of appreciation to Bob Young for his encouragement and the very interesting conversations we had during the research process. Thanks to Nikki Robson for her help in proof-reading my drafts.

My grateful thanks to each of the interviewees, who I cannot name for obvious reasons, who kindly participated in this research and shared their perspective of and experience in strategic alliances.

I would also like to extend my thanks to the people from CEPMLP; I don't want to mention individuals in order to avoid the risk of missing someone.

Thanks to my parents Miguel and Emelia for their unconditional support, my brother Miguel, sister Emelia and uncle Mauro and their respective families.

This work is dedicated to my wife Claudia, my son Joaquin and my daughter Daniela for taking part in this journey with me.

ABSTRACT

Economic, technological, informational, social and political factors are driving organisations to pursue different forms to enable them to respond more quickly to a dynamic and changing environment. The relationship between business organisations and stakeholders has been evolving. The internationalisation of firms requires the development of skills and knowledge to enable them to compete through cooperation in the form of strategic alliances.

The energy industry is high profile in many countries as natural resources are considered to be of national or public interest. The development of activities in this sector are highly influenced by economic, political and social factors. In the energy sector, which is different from other industries, the formation of strategic alliances has been normal practice. In order to face the challenges of an industry where cooperation is essential, the expectation is that their relevance as part of business practice will only increase.

Despite their popularity, strategic alliances have a high failure rate. Consequently, there is a need to understand how and why strategic alliances succeed or fail in order to enhance the understanding of their performance. Research in the field is extensive but fragmented and there is insufficient literature on strategic alliances which takes a process theory approach. Conventional processes for the development of strategic alliances fail to integrate the wider elements which influence the alliance's performance. Therefore, the research aim is to gain an in-depth understanding of the performance of strategic alliances in the energy sector. This is achieved through a qualitative study conducting comprehensive, semi-structured interviews with those with experience in strategic alliance development.

Findings and literature show that each strategic alliance is unique - there is no a single definition. There are different types of strategic alliance and this could contribute to viewing strategic alliances as complex. In a dynamic and uncertain environment there is a need for flexibility and the capacity to adapt and accommodate change. The selection of the type of strategic alliance influences the degree of freedom to manage them. This highlights the degree of influence of the individual over the organisation and suggests considering this in the light of institutional theory, and around agency theory.

Performance measurement is complex and requires a multi-perspective approach which includes softer metrics and taking stakeholders' preferences into consideration. Partnering is complex; managing more than one organisation is difficult as they have different cultures and ways of working. The sense of equity of rewards for each partner impacts performance. Change is natural and complex, expectations, interests and objectives shift and failure could be merely a perception.

Managers in alliances are constrained by the structure selected. In addition, they can face a dilemma over a conflict of loyalty to the parent organisation and have some concerns about the future of their career. Furthermore, they expect endorsement from executives who influence the alliance through their decisions on structure and selection of management. The skills of managers are, therefore, important in enhancing performance within each alliance. The likelihood is that strategic alliances, and the rationale for implanting them, is going to continue to be relevant. The increasing participation of communities in these complex business decisions is also an important factor for consideration.

My contribution to theory lies in developing a holistic dynamic multi-perspective process model of strategic alliances, integrating different theoretical approaches, the literature review, the findings of this research, and, finally, my personal experience in the field. The model created in this thesis utilises the explicated data themes to provide a framework in which strategic alliances can be analysed and performance understood. This framework also has practical implications which assist in the prevention of problems and poses possible solutions to make strategic alliances in the energy sector work more effectively.

CHAPTER 1 ‘INTRODUCTION’

The purpose of this introduction is to present the background to the research undertaken in this thesis. The thesis seeks to understand the performance of strategic alliances in the energy sector. This introductory chapter explores the context, the research problem in the existing literature, the conceptual approach, aim of the research and contribution, the methodology and methods implemented and finally outlines the structure of the thesis.

Background

This PhD thesis intends to make four contributions to the literature, theory and practice on strategic alliances in the energy sector. Firstly, a cultural approach is taken (Reichie et al 2010; Giorgi et al 2015) to developing a new process theory to understand the performance of strategic alliances and how and why they succeed or fail (Langley et al. 2013). As a second contribution, this research integrates hitherto fragmented literature on strategic alliances and provides new data on how strategic alliances are developed through the lens of experienced practitioners in the energy sector. Thirdly, it provides an agenda for future research into strategic alliances from a process perspective. The fourth contribution is the provision of a holistic dynamic multi-perspective process framework that will assist practitioners in managing and improving the performance of strategic alliances in the energy sector.

I will now outline the background to this work by examining the global drivers and expectations for the development of strategic alliances.

Economic, technological, informational, social and political factors are driving organisations to pursue different forms in order to respond more quickly to an increasingly dynamic and changing environment. They need to be flexible if they want to increase their chances of success in a field where rigidity and bureaucracy impose serious challenges that can jeopardise the future of organisations. This dynamic organisational environment necessitates the search for innovation in structures, processes and boundaries. Cost reduction, learning and knowledge transfer, technological development, innovation management, the emergence of knowledge-based economies and deregulation of state control are consequences of globalisation (Pettigrew et al. 2000).

The management of relationships with stakeholders is increasing in importance. Knowledge, capability development at intra and inter-organisational level is required to manage the change in relationships with suppliers and customers. Organisations are focussing on core competencies, so acknowledging that they cannot be effective across the board. Tasks are designated to partner organisations to harness their capabilities potentially through strategic alliances. International firms are strengthening internal networks among functions, divisions, countries and regions in order to speed the transfer of knowledge and skills. They are investing in alliances and other partnerships to compete through co-operation (Pettigrew, Massini et al. 2000). Co-operative strategies are a means to engineer strategic change; the influence of strategic alliances in so doing is expected to continue (Harrigan 1988; Harrigan 2015).

For some industries, strategic alliances are regarded as a new form of organisation and recent decades have seen an increase in the pace of growth. Early studies indicated an increase in their relevance, and the more recent studies available confirm this trend. For example, total revenue from alliances of USA firms in 1980 was 2%; in 1997 it had grown to 21% and it was expected to rise to 35% in 2002 (Das and Teng 1999). 'Many of the world's largest companies had over 20 percent of their assets tied up in alliances. Many others depend on alliances for 30-50 percent of their research expenditures or annual revenues' (Ernst 2003, p. 19). Moreover, 'a study by partner alliances reported that over 80% of Fortune 1000 CEOs believed that alliances would account for almost 26% of their companies' revenues in 2007-08 (Kale et al. 2009, cited in Kale and Singh 2009 p.45).

Context for strategic alliances in the energy sector

In contrast with other industries, strategic alliances are not a new phenomenon in the energy sector (Kent 1991). This sector, particularly in the petroleum industry, has been characterised as high-risk, for two reasons. Firstly, due to the technical challenges embedded in the nature of the activity and secondly because of geopolitical issues related to the location of natural resources. Since the time first oil wells were discovered in America and brought to production, companies have collaborated to raise the capital required for investment purposes. Through collaboration, they also gain from specialisation, with some partners focusing on finance while others dealt with the learning and innovation processes

associated with the industrial process (Yergin 2012). ‘The practice of sharing capital costs between competitors is characteristic of the upstream oil industry, and is not common in other industries’ (IFP 2004, p.213).

Companies in the sector also collaborated with others in cognate industries to gain competitive advantage. Thus, for example, Rockefellers’ Standard Oil Company began to collaborate with the rail companies with the objective of controlling the market. He vertically integrated by acquiring refineries and collaborating with other companies where he had ownership, with the main objective to control the market (Chandler 1977; Yergin 2012).

As the growth in demand outpaced supply, American companies expanded overseas. They were looking for additional resources in new markets in developing countries, seeking to establish new forms of collaboration and at times partnering with Governments. For instance, strategic alliances in the form of joint ventures were necessary to share the risks of exploration in the Middle East. For strategic reasons, the Oil Majors (the so called Seven Sisters) were among the first energy companies to implement joint ventures. Following this, the Oil Majors utilised joint ventures in order to facilitate the participation of Middle East Governments in order to achieve stability in their relationship (Sampson 1991).

Strategic alliances in the industry have continued, for example with the oil major, Shell. A public multinational and one of the top 10 energy companies (Forbes and Platts ranking 2012), Shell reported that from their major projects on stream and under construction the common factors were that the projects are global, take place in different parts of the world, face technical challenges and the majority are developed through strategic alliances (Shell, 2014). Moreover, its former CEO Peter Voser stated that: ‘Partnerships would be more important and needed, between NOCs and IOCs but also with Government's and Stakeholders’ (Voser 2013).

The development of activities in the energy sector are strongly influenced by political, economic and social factors as natural resources are a matter of national or public interest (IFP 2004; Duval et al. 2009; Yergin 2012). The future holds challenges for the energy industry and it is difficult to see that these can be overcome without collaboration among countries and companies. According to the International Energy Agency, in the world

energy outlook 2014 in their central scenario energy demand will grow by 37% by 2040, and the main drivers are population and GDP growth. Investment to meet energy demand will be relevant. For example, in upstream oil and gas development it is estimated that \$900 billion per year will be required by the 2030s to meet demand. However, there are serious concerns as to whether investment will be readily available, due to factors such as the complexity and capital intensity of Brazilian deepwater; challenges in developing the shale industry outside USA; uncertainty of Canadian oil sands production; and political sanctions on Russia constraining access to technology and financial resources. Concerns over gas security have arisen due to the conflict between Russia and the Ukraine. Other factors which add to the complexity are that nuclear energy has an uncertain future, electricity is inaccessible to many people, there has been a continued rise in global greenhouse-gas emissions and an increase in air pollution in the world's fast-growing cities (International Energy et al. 2014).

The Energy industry is a dynamic environment where change is permanent. - this can be seen as a 'business as usual' situation, the current scenario for the next 20 years confirms this. There will be changes in the market flow of the oil because the development of the shale industry in USA, regionalisation of the liquefied natural gas markets; continuation of the change in the energy mix, where renewables, unconventional fossil fuel and gas increase their share (BP 2015). In certain regions, the evolution of the industry is demanding coordination and collaboration among its different actors in order to maximise the economic recovery of their resources, as with the UK Continental Shelf (Wood 2014).

Current technological breakthroughs are presenting new opportunities for collaboration. Shale gas is changing the flow and structure of the markets and is offering new opportunities for countries and companies. To achieve the development and implementation of new technologies requires collaboration with stakeholders in order to gain support from communities and government, amongst others (Various 2012). The rationale is that no one company can effectively operationalise every economic opportunity it is presented with, thus Dubin (2005) predicted that strategic alliances would increase.

According to KPMG, the proportion of global corporate revenues grew from only 2% in 1980 to its current 35% directly from alliances. In the next five years it is expected that International Oil Companies (IOCs) will move from 30% to 70-80% of their business into

joint ventures (Van Grondelle 2012). In order to face future challenges, energy companies will need to adapt, control their capital and costs and act strategically (BP 2015). Strategic alliances will continue to be a viable option in the energy industry.

Research problem

Despite their popularity, the failure rate for strategic alliances in most industries is traditionally high (Dacin et al. 1997; Das and Teng 1999; Langfield Smith 2008; Walter et al. 2008; Kale and Singh 2009; Gulati et al. 2012).

From early to more recent studies, research shows that there is no consensus on the rate of failure of strategic alliances; various authors have reported different rates. Some authors found that the failure rate was high, around 50-60%, and attributable to a lack of compatibility among partners. These authors suggested a need to look at the differences and commonalities among partners (Dacin et al. 1997). Other authors argued that failure rates of strategic alliances could range from 37% to 70% (Geringer and Herbert 1991), or 50 to 80 per cent (Janis, 1982; Harrigan, 1988; Kogut, 1989; Park and Ungson, 1997; Yan and Zeng, 1999, cited in Walter et al. 2008). Still other researchers have suggested the failure in strategic alliances is between 30% and 70% because they do not achieve their goals or obtain the expected benefits. Some others argued that termination rates could be higher than 50 (Kale and Singh 2009; Gulati et al. 2012). Despite there not being consensus in the figure, there is a common understanding that the failure rate of strategic alliances is high.

There are some firms that appear to be successful in the development of strategic alliances, but the failure rate has been reported as higher than the success rate. In their early study, Varadarajan and Cunningham (1995) identified a need to better understand why some strategic alliances succeed and others fail. This would improve the management and performance of alliances by understanding problems related to systems, structures, and control. However, in the energy sector this gap remains; there are no existing studies which focus on the performance of strategic alliances.

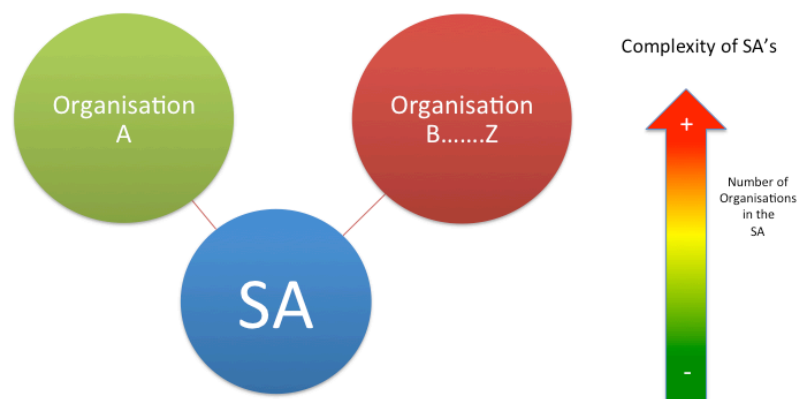
Although there is extensive research in the field of strategic alliances, the research is fragmented. A variety of theories have been used to study strategic alliances, but there is a dearth of literature which takes a process approach and helps to understand the performance of strategic alliances in the energy sector (Ariño 2003, Mainela 2008). The weakness of

most of the studies on performance in strategic alliances is that they have taken a variance theory approach to understanding the ‘what’ of strategic alliances, e.g. antecedents, dependent variables and outcomes and do not consider the ‘how’ or implementation. Variance theory deals with co-variations among variables. It tends to ignore time by compressing it into variables, thus reducing its role in comparative statistics and missing the temporal flow of organisational life (Langley et al. 2013). Conventional processes for the development of strategic alliances fail to integrate the wider elements which influence the alliance’s performance. Therefore, I employed both a cultural (Giorgi et al. 2015) and a process theory approach in order to understand why and how phenomena (such as strategic alliances) change or remain stable over time.

Conceptual approach

Strategic alliances are considered as hybrid organisations which involve resources or governance structures from at least two organisations (Borys and Jemison 1989). This makes them more complex to manage than a single organisation because of differences in culture, language, ways of working and expectations (Ring and Van de Ven 1994, Li et al. 2002). This complexity is illustrated in the following figure.

Figure 1-1.- Complexity of strategic alliances



The above diagram represents at least two organisations entering into a strategic alliance. The arrow on the right shows how complexity increases as the number of organisations involved in the alliance increase.

The development process of strategic alliances is conventionally described in in four stages:

partner selection, governance design, implementation and management (Jiang 2008, Kale and Singh 2009). However, this model provides insufficient understanding of the complexity of strategic alliances' performance. It could, therefore, be expanded into a multi-perspective model by taking a cultural approach and utilising process theory to understand how strategic alliances emerge, change, unfold and evolve over time (Langley 1999; Langley et al. 2013; Giorgi et al 2015). The narrative surrounding strategic alliances can also aid an understanding of their performance by constructing cultural visions among different individuals who has been involved in their development (Reichie et al 2010, Giorgi et al 2015).

This is illustrated in the following figure:

Figure 1-2.- Multi-perspective conventional model for strategic alliances



Source: Adapted from Jiang 2008 and Kale and Singh 2009

The multi-perspective model presents at least two organisations with their own internal processes entering a strategic alliance. A new multi-perspective model for the strategic alliance needs to be developed - a holistic process model that considers other fundamental elements of the processes, thereby understanding the performance of strategic alliances in the energy sector. A strategic alliance framework, based on a cultural and processual approach and constructed from the perspective of individuals with experience in alliances in the energy sector, can help to understand how strategic alliances work in the energy

industry. (Young 2004, Small et al., 2010; Smets et al., 2012,).

As presented in the discussion chapter, this research proposes a new holistic dynamic multi-perspective model.

Methodology and Methods Approach

The aim of my research was to gain an in-depth understanding of the performance of strategic alliances in the energy sector. A qualitative study was therefore developed and the following research questions were posed:

- How and why have strategic alliances been developed in the energy sector?
- How and why do they appear to succeed or fail?
- Why do firms engage in strategic alliances despite success rates not being high?
- How can we make strategic alliances in the energy sector work more effectively?

These research questions provided the foundation to address the problems associated with strategic alliances, and by so doing accomplished the main purpose of this research - to understand the performance of strategic alliances from a process theory approach. The four questions follow a sequence that help understand strategic alliances: firstly, by seeking to understand how and why strategic alliances have developed in the energy sector; secondly by considering the failure rate of strategic alliances, exploring how and why they succeed or fail; thirdly, why firms engage in strategic alliances despite low success rates; and, finally, how more effective strategic alliances in the energy sector can be created. The findings of these research questions gave shape to the process represented in a holistic dynamic multi-perspective framework. This framework will assist practitioners in managing and improving the performance of strategic alliances in the energy sector.

This thesis attempted to understand the performance of strategic alliances from the perspective of those with experience in their development. Therefore, an idealist ontological assumption and consequently a constructionism epistemological assumption were taken, where participants informed their knowledge of strategic alliances by making

sense of their experience, acknowledging that every participant produced independent knowledge (Blaikie 2009).

An abductive approach on the reasons for the failure or success of strategic alliances was taken to obtain data that was sufficiently detailed. This richness would promote an understanding by exploring, identifying and explaining themes and patterns regarding the performance of strategic alliances in order to integrate these in an overall conceptual framework (Blaikie 2009).

As strategic alliances deal with organisational theory and management far too complex to be explained by laws in the same way as physical sciences (Saunders 2012, Sekaran and Bougie 2013), the research philosophy selected was interpretivism.

This research was mainly developed by primary data, within a semi-natural setting where individuals with experience in the development of strategic alliances talked about their perspective of the energy sector (Blaikie 2009).

The sample is non-probability in a single stage as sampling is complicated in the area of strategic alliances. Information on details and perceptions of people working in strategic alliances are not available in public sources, sampling methods used were judgemental and snowballing. The sample is small to allow resources to be focussed intensely on the subjects of the research. The sample in this qualitative study is unrepresentative though the data is deeper and more detailed (Blaikie 2009).

In-depth interviews, developed in the form of semi-structure interviews, were employed. These gave me the opportunity to get closer to the meanings and interpretations, accounts, perspectives and experiences of those involved in this field (Blaikie 2009).

Thesis outline

This thesis is divided into eight chapters, where chapter one presents the introduction, chapter two the literature review, chapter three the methodology-methods, findings are presented in chapter four, five, and six, chapter seven is discussion and chapter eight conclusions.

This introductory chapter presented the current understanding and background to the

research undertaken and its intended contribution. It also presented the research problem, the conceptual approach, explained the methodological approach and finally outlined the structure of the dissertation.

Chapter two presents the literature review in the field of strategic alliances. It firstly applies a systematic literature review approach in the field of strategic alliances, followed by material on the context for the research. I discuss research themes that have been of interest in the field, including the meaning, types and motives of strategic alliances. This is followed by a description of the process of alliances. I then analyse the issues related to performance, the literature on alliance portfolios, outline gaps found in the literature and how my research will fill these.

Chapter three explains the methodology and methods followed in this thesis, in terms of my research design and the rationale behind this selection. It provides detail on the decisions made and justification for the research topic and problems, research questions, research strategy considering the ontology, epistemology and axiology, research paradigms, concepts, data sources, methods of data collection, data reduction and analysis and ethics.

The findings' chapters are organised according to the general themes explored during the interviews: concept, process, performance, influence, and prospects of strategic alliances. Chapter four presents the findings on the first two themes: concept and process, chapter five the findings on performance, while chapter six presents the findings on influence and prospects of strategic alliances.

The discussion in Chapter seven presents the interpretation and critical evaluation of the findings of previous chapters in the light of my literature review. I begin by revisiting the research purpose and the research questions that were posed in chapter 3 'Methodology-Methods' and describe how the findings have contributed to answer these. Key findings are then presented, followed by connecting these to the literature. This chapter continues by describing the contribution of this research to theory and practice and presenting some suggestions for further research. Finally, Chapter eight presents the conclusions of this thesis.

Conclusions

Economic, technological, informational, social and political factors are driving organisations to pursue different organisational forms to respond more quickly to a dynamic and changing environment. The relationship with stakeholders has been evolving and the internationalisation of firms requires the development of skills and knowledge around how to compete through cooperation in the form of strategic alliances.

The energy industry is relevant to countries as natural resources are considered to be of national or public interest. The development of activities in the sector are highly influenced by economic, political and social factors. In the energy sector, which is different from other industries, strategic alliances have been normal practice. The expectation is that their relevance as part of business practice is going to increase in order to face the challenges of an industry where cooperation is essential.

Despite their popularity, strategic alliances have a high failure rate. There is a need to understand how and why strategic alliances succeed or fail in order to enhance the understanding of their performance. Research in the field is extensive but fragmented and there is a dearth of literature on strategic alliances which takes a process theory approach. Conventional processes for the development of strategic alliances fail to take account of the wider elements which influence the alliance's performance. Therefore, by a cultural approach and utilising process theory, the research aim is to gain an in-depth understanding of the performance of strategic alliances in the energy sector. It develops a qualitative study through in-depth, semi-structured interviews with those with experience in their development. This research also contains practical implications for preventing problems and posing possible solutions to make strategic alliances work more effectively.

The next chapter presents a systematic literature review in the field of strategic alliances.

CHAPTER 2 ‘CREATING, MAINTAINING AND DISRUPTING STRATEGIC ALLIANCES: A LITERATURE REVIEW ’

Introduction

The purpose of this chapter is to present the literature review undertaken in the field of strategic alliances. It firstly describes the development of a more systematic approach (Tranfield, Denyer et al., 2003) to reviewing the literature on strategic alliances, and the chapter then presents material on the context of the research. I begin with research themes that have been of interest in the field, including the meaning, types and motives of strategic alliances, followed by describing the stages of alliances. I then analyse the issues related to performance, literature on the portfolio of alliances, outline the identified gaps in the literature and how I propose to fill these gaps with my research.

Towards a Systematic Literature Review

I undertook a literature review to assist in understanding the difficulties in developing strategic alliances. Following my reading of Tranfield et al. (2003), I attempted to develop a more systematic approach to the literature review, while at the same time applying some flexibility in approach so as not to constraint the ‘capacity to explore and develop ideas’ (Tranfield et al., 2003 p. 213). I also employed an adaptable method to incorporate or exclude information in order to accommodate the dynamic needs of the research as it was being conducted.

A literature review is best described as a three stage process. Firstly, I began by searching for sources that allowed me to understand the problems with strategic alliances. I secondly identified both topics of interest for the literature review and papers that review the literature of strategic alliances. This allowed me to identify topics of interest and relevant sources from the perspective of other authors. From the identification of the review papers, I was able to construct a database of sources with references. This was useful to confirm the papers that I have already reviewed and also to add new sources, which were then included or excluded. The third stage involved a continuous search for new papers conducted via search engines and subscribing to the alerts of professional associations which produce papers in this field.

To provide greater detail, the literature review was undertaken by identifying key words: strategic alliances, problems, motives, performance, success, failure, literature review and theories. I searched in electronic databases available in the University, including Scopus and EBSCO and the search engine Google Scholar. Citations and abstracts were exported to the reference software End Note. The inclusion criteria for papers was based on firstly reading the abstract of the paper, looking at the journal and the number of citations. I then analysed the source and looked at specific elements, for example concepts, ideas and theories used, epistemological and ontological grounds, main questions and problems addressed, methodology used and further research suggested (Hart 1998).

Literature Review on Strategic Alliances

Failure rate of Strategic Alliances

The popularity of strategic alliances as a method of organising is high among national and international firms and the activity of strategic alliances has increased (Hoffmann 2007, Walter, et al. 2008). The pace of growth of alliances in recent decades has accelerated, with Das and Teng (1999, p.50) in their seminal paper claiming:

‘the alliance activities of the thousand largest U.S. firms are expected to account for 35 percent of their total revenue by 2002—up from less than two percent in 1980 and 21 percent in 1997. The number of alliances has been growing at a rate of 25 percent per year since 1985’.

The trend towards growth in strategic alliances is similar across the globe, with research reporting that ‘many of the world’s largest companies had over 20 percent of their assets tied up in alliances. Many others depend on alliances for 30-50 percent of their research expenditures or annual revenues’ (Ernst 2003, p. 19). Moreover, ‘a study by partner alliances reported that over 80% of Fortune 1000 CEOs believed that alliances would account for almost 26% of their companies’ revenues in 2007-08 (Kale et al. 2009, cited in Kale and Singh 2009, p.45).

According to KPMG, the proportion of global corporate revenues directly from alliances grew from only 2% in 1980 to 35% currently. In the next five years it is claimed that International Oil Companies (IOCs) will move from 30% to 70-80% of business into Joint

Ventures (Van Grondelle 2012).

Despite their popularity, however, the success rate for strategic alliances in most industries is not high (Das and Teng 1999; Walter et al. 2008; Kale and Singh 2009; Gulati et al. 2012). Unfortunately many of the alliances formed are terminated; strategic alliances involve particular risks that jeopardise performance and seem to be the cause for the high rate of failure (Das and Teng 1999).

From early to more recent studies, research shows that the failure rate is attributable to a variety of reasons and that there is no consensus on the failure rate of strategic alliances; various authors reported different rates. Some authors found that failure was high (around 50-60%) and attributable to a lack of compatibility among partners. These authors suggested that there was a need to look at the differences and commonalities among partners (Dacin et al. 1997). Another group of authors argued that failure rates could be from 37% to 70% (Geringer and Herbert 1991) or in the range of 50 to 80 per cent (Harrigan 1988; Janis 1982; Kogut 1989; Park and Ungson 1997; Yan and Zeng 1999, cited in Walter et al. 2008). Yet other researchers have suggested it is between 30 and 70% as strategic alliances either do not meet their goals or get the benefits expected. Some others argued that termination rates could be higher than 50% (Kale and Singh 2009; Gulati et al. 2012). Despite the fact that there are a variety of figures cited, these different studies all point to high failure rates.

Reasons for failure rates

There are some firms that seem to be successful in the development of strategic alliances, but overall, failure rates are reported to be higher than success rates. There is a need to better understand why some strategic alliances succeed and others fail in order to improve their management and performance by understanding problems related with systems, structures, and control (Varadarajan and Cunningham 1995).

Among the reasons cited for failure were: the misaligned incentives of self-interested agents; that conflict among partners decreased commitment and so damaged the relationship (Gulati et al. 2012); and an overall lack of commitment (Shah and Swaminathan 2008).

Despite alliances being a source of competitive advantage, there is a high level of failure. This could be related to a lack of cooperation among partners because of competition or opportunistic behaviour (Suen 2002). There may also be differences between partners' objectives and interests (Langfield-Smith 2008). Some alliances also fail because companies do not implement their alliance strategy (Suen 2002). The success rate of strategic alliances is significantly lower compared to non-alliances. This discounts acquisitions and subsidiaries as they are different entities entirely (Das and Teng 1999).

Das and Teng (1999, p.50) claimed that 'although many firms have benefited from strategic alliances, many others have been disappointed by poor performance, and still more are sceptical about what an alliance could achieve for them. Strategic alliances are generally seen as a risky strategy whose success is often unrelated to an individual partner firm's efforts'. Their case study highlighted that managing alliances is much more complicated and difficult than managing single firms because the partner firm also needs to be managed.

There could be a variety of explanations for the termination of alliances: some of them could be related to exogenous factors and others to endogenous. External factors can include natural disasters or change in political policies. As regards internal factors, Ring and Van de Ven (1994, p. 108) examined four reasons for the dissolution of cooperative interorganisational relationships: (a) excessive legal structuring and monitoring of the relationship, (b) conflict between roles and interpersonal behaviours of organisational parties, (c) conditions for violations of trust, and (d) escalating commitments to failing transactions.'

The failure rates and main reasons expressed by a variety of authors are summarised in the following table.

Table 2-1.- Failure rates

Failure rate	Main Reasons for Failure	Author(s)
30-70%	Goals not met or expected benefits not realised	Kale and Singh 2009
>50%	Misaligned incentives of self-interested agents	Gulati et al. 2012
50-60%	Partners' incompatibility	Dacin et al. 1997
50-80%	Not achieved objectives or not recovered financial costs (Bleeke and Ernst 1991)	Various in Walter et al. 2008
High	Unique risks inherent in strategic alliances Differences between partners objectives and opportunistic behaviour	Das and Teng 1999 Groot and Merchant, 2000; Dekker 2004, in Langfield-Smith 2008

Source: Adapted from various Authors.

Despite failure rates for strategic alliances varying according to author, we have seen that they are high. The reasons for failure can be attributable to inherent risks in strategic alliances, incompatibility of partners' objectives, the potential for opportunistic behaviour, self-interested goals or no implementation of the alliance strategy. Despite this, strategic alliances are on the rise and are going to be used more frequently. Given this, it is necessary to develop a greater understanding of the reasons for their failure.

Themes raised in previous research into strategic alliances

Various authors have reviewed the literature on strategic alliances (Lyons 1991, Parkhe 1993, Robson et al. 2002, Combs and Ketchen 2003, Hillebrand and Biemans 2003, Combs et al. 2004, Petrovic et al 2006, Nippa et al. 2007, Street and Cameron 2007, Culpan 2009, Ren et al. 2009, Wassmer 2010, Meier 2011, Parmigiani and Rivera-Santos 2011, Christoffersen 2013, Shi et al. 2012, Gomes et al. 2014). Gomes et al. (2014), during his

22-year review of strategic alliance research in leading management journals, usefully categorised and identified the themes of research interest in the field. This is summarised in the following table:

Table 2-2.- Previous research identified by Gomes (2014)

Research Categories	Themes	Authors
Pre-agreement phase	<ul style="list-style-type: none"> Motives for collaboration, joint ventures as strategic choices, partner selection and negotiations and contract 	Doz, 1996; Doz et al. 2000; Glaister & Buckley, 1996; Parkhe, 1993b
Post-agreement phase	<ul style="list-style-type: none"> The effective management of alliances, cross cultural understanding and company performance 	Brouthers & Bamossy, 2006; Buckley et al., 2009; Christoffersen, 2013; Lee et al., 2013; Luo, 2001; Reuer et al., 2002; Slater and Robson, 2012.
Topical areas	<ul style="list-style-type: none"> Franchising or licensing 	Combs et al., 2011; Combs & Ketchen, 2003; Jiang, 2012; Shane, 1998; Xia, 2011
	<ul style="list-style-type: none"> Strategic alliances and organisational strategy 	Datta et al., 2009; Nielsen & Gudergan, 2012; Poulis et al., 2012; Ripolle's et al., 2012; Yu et al., 2013
	<ul style="list-style-type: none"> The relationship between internal and external cooperation 	Hillebrand & Biemans, 2003; Mudambi & Tallman, 2010; Stettner & Lavie, 2013
	<ul style="list-style-type: none"> Small business alliances and networks 	Gulati et al., 2000; Koka & Prescott, 2008; Lee et al., 2012; Min & Mitsuhashi, 2012
	<ul style="list-style-type: none"> Knowledge and learning 	Dussauge et al., 2000; Inkpen, 2000; Kale & Singh, 2007; Park & Lee, 2012
	<ul style="list-style-type: none"> Impact of governance on alliance 	Albers et al., 2013;

	effectiveness	Barkema et al., 1997; Lui & Ngo, 2012; Park & Lee, 2012
Emerging aspects	• The temporal dimension	Shi et al., 2011
	• Managing alliance portfolios	Das & Teng, 2002; Vapola et al., 2010; Wassmer, 2010
	• Risk, trust and control	Anderson et al., 2013; Costa e Silva et al., 2012; Das & Teng, 2001; Inkpen & Currall, 2004; Liu, 2012; Roy, 2012
	• Knowledge management	Dyer & Hatch, 2006; Inkpen, 2008; Inkpen & Beamish, 1997; Kale et al. 2000; Meier, 2011; Shenkar & Li, 1999; Simonin, 2004
	• Organisational justice	Luo, 2005, 2008
Started to receive more attention	• Cultural understanding	Shi et al., 2012

Source: Built from Gomes (2014)

Gomes (2014) classified the evolution of the interest in strategic alliances research under five categories. Earlier studies were interested in the pre-agreement phase of strategic alliances; interest then moved to the post-agreement phase, topical areas and emerging aspects. More recently, cultural understanding is receiving more attention, although this literature is still fragmented. According to Gomes' study sample the interest in alliance performance has been the second most popular topic of interest among researchers (11.3% of total) and is growing. Qualitative analysis as a method of research (15% of total) has been less common than quantitative research - 53% of the studies sample was empirical. More research has been conducted in the industrial (35.7 %) and mostly developed on semi-conductors, automobiles, pharmaceuticals, bio-technology and electrical goods. The area of performance has also attracted a high level of interest among researchers, but very

little qualitative research has been conducted.

However, before I analyse some of these themes, we need to define what we mean by strategic alliances. The following section discusses the various definitions of strategic alliances as found in the literature.

Definition of Strategic Alliances

The identification of a single definition of strategic alliances is a very challenging task. Authors define strategic alliances in different ways, and classifications on how to consider a strategic alliance varied. Some authors consider strategic alliances as different from joint ventures; some others saw joint ventures as part of the strategic alliance (Anderson 1990, Kale and Singh 2009). Furthermore, some authors introduced terms which expand the types of relations among organisations. For example, the term inter-organisational relationship includes strategic alliances, partnerships, coalitions, joint ventures, franchises, research consortia and various forms of network (Ring and Van de Ven 1994).

Early studies differentiated strategic alliances and joint ventures. Anderson (1990) used the terms 'joint venture' and 'strategic alliances' separately. He defined 'joint venture' as 'at least two companies pooling resources to create a new organisation' (p.19), while strategic alliances were 'long -term supply contracts and joint research and development'. Anderson argued that strategic alliances 'while they do not create a separate business entity, have much in common with joint ventures. They can and should be evaluated in the same manner' (p.29). It seems that, from Anderson's perspective, the main difference between a joint venture and a strategic alliance is in the creation of a separate entity. However, he acknowledged a similarity in the characteristics of a joint venture and those of a strategic alliance. This implies that the principles of his study are applicable across both terms. The argument regarding the similarities between joint ventures and strategic alliances is considered relevant in order to allow an extension of the research for some areas of study - for example performance, where the main focus of research has been on joint ventures in the international arena.

Broader definitions for strategic alliances are evident from the literature. Some authors refer to them as collaborations involving the participation of multiple firms (at least two) or setting a long-term commitment of resources in the alliance with the purpose of achieving

strategic goals (Christoffersen 2013). Others stress knowledge or resource-sharing. For example, Gulati (1995, cited in Kale and Singh 2009 p. 46) described a strategic alliance as one that ‘involves the exchange, sharing, or co-development of resources or capabilities to achieve mutually relevant benefits’. Similarly, Das and Ten (1999) suggested that strategic alliances were ‘inter-firm cooperative agreements with the purpose of achieving competitive advantage for the partners’ (p. 50). Porter (1986) used the term ‘coalitions’ to describe alliances as a way to bring competitors together to coordinate or share value chains, thus broadening the scope of the chain to the benefit of the parties involved.

In defining joint ventures, Contractor and Lorange (1988) claimed that the joint venture ‘often implies the creation of a separate corporation, whose stock is shared by two or more partners, each expecting a proportional share of dividends as compensation’ (p. 7). They also acknowledged that some firms could develop joint activities without creating a new entity, agreeing instead on the governance mechanisms to allocate tasks, costs, and revenues. Nippa et al (2009) defined international joint ventures as cooperative arrangements between at least two parties from different countries.

Joint ventures have also been considered under a broader classification. Oliver (1990) defined interorganisational relations as ‘enduring transactions flows, and linkages that occur among or between an organization and one or more organizations in its environment’ (p. 241). She went on to identify six types: trade associations, agency federations, joint ventures, social service joint programs, corporate-financial interlocks and agency-sponsor linkages.

Some authors have connected the term ‘strategic’ with the duration of the alliance. Shapiro (1985, cited in Glaister and Buckley 1996, p. 303) gave meaning to the term strategic ‘in the sense that strategic decisions involve long-lasting commitments as distinct from tactical decisions which are short terms responses to current environment’.

The definition of strategic alliances has evolved over time; there is no a single standard definition, authors have different perceptions of the meaning. Moreover Bleeke and Ernst (1991) argued that all alliances are different from each other. Considering the various definitions of strategic alliances from the literature, and for the purpose of this thesis it can be argued that strategic alliances are collaborative agreements made by at least two firms

for the purpose of achieving goals through common interest.

The following section will discuss the various types of strategic alliances found in the literature.

Types of Strategic Alliances

Different theoretical approaches have been utilised to study preferences in the selection of governance structures. These include transaction cost economics, social exchange, resource dependence, strategic behaviour, bargaining theory and the resource-based view (Das and Teng, 2001). Various authors have attempted to develop typologies of strategic alliances. Early studies, such as the one developed by Contractor and Lorange (1988), categorised them under the term 'cooperative arrangements', where the range spanned a spot transaction to a merger. The legal form and the strategic impact on the global operations of the partners were also used as a basis for differentiation. Among these arrangements were technical training/start-up assistance agreements, production/assembly/buy back agreements, patent licensing, franchising, know-how licensing, managements/marketing service agreement, non-equity cooperative agreement in exploration, research partnership and development/coproduction and equity joint venture. Joint R&D and product development are considered as intensive alliances (Kummar 1998, p. 365). Dacin, et al., (1997) suggested that within strategic alliances, both equity and non-equity joint ventures are considered collaboration agreements in manufacturing, marketing, distribution, and research and development.

There are different opinions as to how strategic alliances should be classified and whether mergers and acquisitions are considered as strategic alliances. Porter (1986, p.315) claimed that 'coalitions are long-term alliances with other firms that fall short of outright merger, such as joint ventures, licenses and supply agreements'. Ariño (1998, p.323) considered strategic alliances as within 'the extremes of a spot market contract and a merger or acquisition'. Blecke and Ernst (1991) suggested that acquisitions are a more effective choice when growing core businesses, but when expanding into new geographic regions or new businesses, cross border alliances perform better. The rationale is that when partners develop business in the same market, conflict can result due to competitive interests (Borys and Jemison 1989). Most scholars consider that acquisitions are not strategic alliances

because of the difference in control, ownership, and independence of the firms involved (Kale and Singh 2009). However, Borys and Jemison (1989) coined the term ‘hybrid’ to refer to agreements where resources or governance structures are used from at least two organisations; these authors developed a typology of five, among them mergers and acquisitions and joint ventures. There is some diversity shown in literature in categorising mergers and acquisitions as strategic alliances. For the purpose of this research, and taking scholarly opinion into account, mergers and acquisitions will not be considered as strategic alliances.

Buckley (1992, cited in Glaister and Buckley, 1996 p. 301) defined an alliance as an ‘inter-firm collaboration over a given economic space and time for the attainment of mutually defined goals’. Contrary to the conventional view, Glaister and Buckley (1996) claimed that alliances excluded some inter-firm co-operative forms (such as licensing and franchising) because parties had disparate goals. Some other authors classified strategic alliances as joint ventures, licensing agreements, distribution and supply agreements, research and development partnerships, and technical exchanges (Inkpen and Currall 2004).

Hennart (1988, cited in Dussauge et al., 2004 p. 701-2) developed a typology for strategic alliances in terms of scale and link. Scale alliances are related by similar contributions along the value chain in order to achieve economies of scale which can be joint R&D, and joint production. Partners in link alliances contribute different skills and resources, for example in market alliances a partner gains access to a market bringing different products. In his review of the literature, Dussauge et al., (2004) when looking at scale and link alliances, concluded that volatility is less for the former.

Some authors have developed a more simplistic typology for strategic alliances. For instance Culpan (2009) divides them into and non-equity equity alliances. Here, equity alliances could be joint ventures or block equity ownership and non-equity alliances is a generic term which accommodates various types of alliances. Culpan also classifies them according to the number of participating partners; dyadic relationships involve two partners and multiple relationships involve more than two. Culpan usefully illustrates this in the following figure

Figure 2-1.- Strategic alliances among partners

	Equity commitments	Non-equity commitments
Dyadic Relationships	<ul style="list-style-type: none"> • Joint ventures with two partners • Equity block ownership 	<ul style="list-style-type: none"> • Licensing • Franchising • Supplier agreements • Outsourcing • R&D Partnership • Marketing partnership
Multiple relationships	<ul style="list-style-type: none"> • Joint ventures with multiple partnership 	<ul style="list-style-type: none"> • Networks community of firms

Source: Culpan 2009

The commitment dimension refers to the amount of equity allocated by partners. Network alliances are developed when multiple firms share resources in order to achieve a common goal. (Culpan 2009)

Das and Teng (2001) claimed that one of the key features of strategic alliances is the type of governance structure which can be applied to cater for differences. He usefully classified the most typical strategic alliances into the following types (See Table 2-3).

Table 2-3.- Common types of strategic alliances

Kind of alliance	Alliance type	Description
Equity alliances	(1) Joint venture	A separately incorporated entity jointly owned by the partners.
	(2) Minority equity alliance	The terms of the alliance include an acquisition of equity shares, by either one or more partners.
Bilateral contract based alliances	(3a) Joint production	The partners share manufacturing responsibilities and supply each other with

		products that are marketed by the partners under their own brand names (Yoshino and Rangan, 1995, p. 135).
	(3b) Joint marketing and promotion	The partners market the same product under the same or different brand names.
	(3c) Joint R&D	The partners combine their R&D efforts and share the rights to the product/service.
	(3d) Enhanced supplier partnership	The supplier not only provides a particular type or line of goods/services, but also becomes an integral part of buyer's operation through extensive cooperation. A higher level of reciprocal interdependence than the traditional buyer-supplier relationship (Borys and Jemison, 1989, p. 246).
Unilateral contract-based alliances	(4a) R&D contract	One partner provides funds to another partner for specified R&D activities, and in return receives or shares market rights to the resulting product/service.
	(4b) Licensing agreement	An agreement 'by which one firm buys the right to use an asset for a period of time..., typically involve a narrow purpose and limited time frame...' (Borys and Jemison, 1989, p. 245).

Source: Das and Teng (2001)

Das and Teng developed this typology to expand beyond the conventional classification of equity alliances and non-equity alliances. They defined unilateral contract-based alliances 'when there are well-defined transfer of property rights... the key feature of these alliances

is that individual firms carry out their obligations independently of each other.’ (p. 15). On the other hand, bilateral contract-based alliances ‘involve the sustained joint creation of property and knowledge for the partners, requiring them to bring in resources and work together on a constant basis... these alliances require partners to put in resources and work together constantly’ (p. 15-16). One of the main differences between unilateral and bilateral alliances is the level of integration; in the unilateral based alliance integration is lower.

The following diagram illustrates the various forms of strategic alliances according to Das and Teng.

Figure 2-2.- Types of strategic alliances



Source: Adapted from Das & Teng 2001

Thus it can be seen that while most researchers classify strategic alliances according to their legal form, others examine them from a strategy perspective. The legal form is influenced by both the competitive conditions and by the conditions faced in a foreign market (legal and tax considerations). There is no simple relationship between the legal form and the goal a strategic alliance wishes to achieve; the legal form does not tell us too much about the contribution of a partner (for instance cash, staffing, management, knowledge, among others) (Porter 1986). On the other hand, the organisational form is critical to the strategic alliance’s evolution and performance; the structural choice supports coordination, learning

and trust in the alliance (Albers et al., 2013). Moreover, the selection of a strategic alliance's form is part of a strategy formulation process which is influenced by subjective forces, such as behavioural, political and emotional elements (Das and Teng 2001).

Das and Teng (2001) suggested that the selection of the form was also influenced by the perception of relational and performance risk, where relational risk is related to the probability and consequences that a partner does not behave according to expectations and performance risk is concerned with the probability and consequences of not achieving the strategic objectives, even if the partner cooperates, due the external environment. These authors suggested that the level of engagement, in terms of equity and investment, differentiates the type of alliance. Joint ventures and minority-equity alliances, being a more engaging form, require more investment and are more difficult to end because of the amount of commitment and cost involved. On the other hand, in unstable markets it seems that non-equity alliances could have an advantage due to their greater flexibility, and because it is easier to reconfigure or terminate them (Varadarajan and Cunnigham 1995).

In the petroleum industry, the fiscal consequences influence the selection of an appropriate structure. In international petroleum agreements, operations are usually developed in the form of a joint venture. Companies from particular countries carefully determine the structure to avoid the joint venture being considered as a taxable entity in terms of a corporation or a tax partnership. For example, American companies seek to maximise deductions and the creation of joint operating agreements are preferable to an incorporated legal entity (Duval et al., 2009).

Strategic alliances in the form of joint ventures are frequently developed in the oil and gas industry. In general there are three types of joint ventures - the full asset joint venture the full business joint venture and the marketing alliance. Full asset is usually in the upstream section of the value chain and organisations ally to obtain or develop specific assets. Among the assets that could be included are fields, pipelines, refineries and LNG projects. Full business joint ventures seek to combine resources to create marketing, supply chain, production and scale synergies. These are usually developed upstream by oil field services companies, but can also take place in midstream, downstream and in the chemicals industries. A marketing alliance is a joint venture with the sole purpose of marketing products, such as in motor fuel retailers and convenience stores (Ernst and Young 2011).

As can be appreciated from the literature related to types of strategic alliances, there are different perceptions among authors on how to classify strategic alliances. The chosen form influences the relationship among partners, thus potentially influencing the performance of the strategic alliances. The following section discusses the motives and rationale to embark on strategic alliances.

Motives for the Formation of Strategic Alliances

The question regarding reasons for forming strategic alliances can be addressed from different points of view. In one of the earliest studies of joint international business ventures, Friedmann and Kalmanoff (1961) identified the motives underlying entering into a joint venture. These included 'the achievement of capital savings and the reduction of risks, the obtaining of management skills and the maintenance of employee morale, the facilitating of sale, the improvements of government relations, and the achievement of good public relations' (p. 2). Tomlinson (1970) discussed the ideologies for and against the development of joint ventures, exposing what authors described at the time as the 'simpliste' school. Under this doctrine, where freedom was of primary importance a joint venture should not be developed. On the other hand philanthropists and developmental idealists favour joint ventures on the basis of their openness to promote international cooperation. A third school, named the strategic pragmatists, emphasised the rationality of engaging in joint ventures. This school highlighted their benefits, in terms of market penetration or development, international integration, and an adequate return of investment.

Later studies pointed out that the idea of cooperation was largely neglected, despite the fact that cooperation and competition were options in corporate strategy. The traditional position tended towards the sole pursuit of organisational strategy, thus relegating cooperation to a 'second best' option for larger firms. Cooperation was enforced by 'external mandates such as government investment laws or to cross protectionist entry barriers in developing and regulated markets' (Contractor & Lorange, 1988, p. 3). As the use of strategic alliances increased, they were perceived as a vehicle by which to enter markets more quickly, achieve economies of scale and gain competitive advantage (Larsson 1998). This section presents theoretical explanations that have been used to understand the motives for entering strategic alliances, the motives identified in the literature and, finally, the link between theory and motive.

Theoretical explanations of motives for entering strategic alliances

There are various theoretical approaches that help us understand the motivation of firms in entering a strategic alliance. Building on the work of Varadarajan & Cunningham (1995) and other authors who have studied motives in this area, I have summarised the theoretical approaches in Table 2-4 below.

Table 2-4.- Theories of motives for forming strategic alliances

Theoretical perspective	Features	Key Author(s)
Domesticated Markets (DM)	As an attempt to influence the firms' environment (main advantage of domesticated markets: reduction of uncertainty of operations, reduction of transactional costs, synergy of combining complementary operations)	(Arndt 1979)
Market Attractiveness and Organisational Power (Transaction cost, strategic behaviour and organisational theory) (MA & OP)	Motivations for establishing cooperative relations could be due to the following factors: i) evasion of small numbers bargaining and opportunism, asset specificity result in high switching costs (based on transaction cost theory), ii) enhancement of competitive positions (based on strategic theory), iii) transfer of organizational knowledge (organizational theory)	(Kogut 1988); (Williamson, 1981)
Interorganisational Exchange Behaviour and Resource Dependency (IEB & RD)	Organisations need from each other because few are self sufficient with respect to critical resources; this consideration drives organizations to depend on each other through	(Pfeffer and Salancik 1978)

	cooperation.	
Interorganisational relationships (IOR)	There are six determinants for collaboration: necessity, asymmetry, reciprocity, efficiency, stability, and legitimacy.	(Oliver 1990)
Resource Based View (RBV)	It links the resources and sustained competitive advantage. Firms should bring into the strategic alliance resources that improve efficiency and/or effectiveness.	(Barney 1991)

Source: built from various authors

Domestic markets are administered markets that are conducted by inter-organisational systems such as conglomerates, franchising, vertical and horizontal integration, joint ventures, joint product development and marketing contracts, joint physical distribution plans and labour-management peace agreements. In these markets, transactions are conducted inside a company, or group of companies, who are bound by a long-term agreement. The motivation to enter a domestic market is in order to gain control over supply and demand. At the same time, cooperative schemes allow gaining economies of scale and take advantage of excess capacity ‘by sharing resources in production, access to supplies, distribution, financing, and general management. Moreover, membership in a cooperating group is an alternative to large corporate size for realizing political economies of scale to shape and control markets and influence government’ (Arndt, 1979 p. 71). However, there is also a risk of eliciting anti-trust issues.

Transaction cost theory differs from strategic behaviour in terms of the objectives of firms. The objective of transaction cost theory is to minimise production and transaction costs, whereas the objective of strategic behaviour is to maximise profits by improving the competitive position of a firm (Kogut 1988). The transaction cost approach involves three levels of analysis applicable when studying organisations. Firstly, the overall structure of the organisation determines the scope of operations and their inter-relatedness. Secondly, the analysis focuses on the operating parts. It identifies the activities that need to be performed, and the rationale to develop these either within or outside the organisation. In

other words, the operating boundary of the organisation. Thirdly, where in the organisation human resources are deployed (Williamson 1981). Organisational knowledge and learning can contribute to understanding the motivation for strategic alliances outside economic bases, where organisations come together in order to exchange or facilitate knowledge. (Kogut 1988)

Inter-organisational Exchange Behaviour and Resource Dependency are based on the principle that an organisation is not self-sufficient. Support, therefore, to cover deficiencies has to come from its environment. Dependency derives from the lack of control and presence of uncertainty in achieving desired outcomes by an organisation. Thus, there is a need for organisations to coordinate and cooperate to achieve their mutual goals. Interdependence is not constant among organisations and changes over time. Dependence on a partner is based on three factors: the importance of the resource, the amount of discretion over the resource from an interested party and, finally, the number of alternatives available for the interested group. The importance of the resource has two dimensions - the relative magnitude of the exchange and the criticality of the resource for each organisation. Discretion over the resource is based on the capacity to decide the distribution or use of a resource, in other words, the amount of control which can be exercised over the resource. This could be through possession, access, actual use and who actually controls the resource (Pfeffer and Salancik 1978). From the resource dependence perspective, strategic alliances are developed as a way of minimising risk and uncertainty (Das and Teng 2001).

The theoretical perspective of interorganisational relationships has a broader classification. This classification includes joint ventures and departs from the assumption that there is a trend towards an increasing connection among organisations; thus, the performance of an individual organisation is dependent upon the ties developed with other organisations. There are six contingencies that are considered critical for the formation of inter-organisational relationships: necessity, asymmetry, reciprocity, efficiency, stability and legitimacy. Necessity to comply with law, regulation or mandates from authorities. Asymmetry refers to the power that can be exercised over other organisations. Reciprocity promotes cooperation, coordination and collaboration in the search for a common benefit. Efficiency is more internally oriented, and is a way for an organisation to improve its operations. Stability is considered as a way to deal with uncertainty through developing

relationships with other organisations. Legitimacy is related to being in harmony with norms, rules, beliefs or expectations of other stakeholders. All these contingencies could interact as imperatives for an organisation to pursue the development of strategic alliances (Oliver 1990).

The resourced-based view considers the assumption that a firm's resources may be heterogeneous and immobile. It assumes that these resources are valuable (improves efficiency and effectiveness), rare, imperfectly imitable and have no substitutes. By acquiring these attributes firms can develop a sustainable competitive advantage (Barney, 1991). Caves (1980, cited in Wernerfelt 1984, p. 172) defined resources as the tangible or intangible assets that are part of a firm during a certain time. These assets can include brands, knowledge, human resources, commercial contracts, equipment, procedures and capital, amongst other things. Eisenhard & Schoonhover (1996, cited in Park et al., 2004 p. 9) argued that resources from partners in an alliance could be a source of competitive advantage.

These theories are based on different drivers for alliance formation, which are: market uncertainty, increased efficiency, resource dependency, skill and resource heterogeneity and imperfect factor markets. However, the common factor, as suggested by Varadarajan and Cunningham (1995), is the pursue of competitive advantage.

An organisation has a competitive advantage 'when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitor' (Barney, 1991 p. 102). Competitive advantage is the value a firm can create over and above the cost of developing a product or service. Porter's (1985) classic analysis initially identified two basic types of competitive advantage: cost leadership and differentiation. He argued that competitive advantage could be achieved by coordinating value chains in related industries through interrelationships. The firm has two choices in achieving a broader scope - either in developing it internally or in forming coalitions with other firms (Porter 1985).

Some authors believed that organisations enter strategic alliances in the search for competitive advantage (Larsson et al., 1998) and acknowledged that strategic alliances are not new. However, there is a renewed interest in this topic due to the development of global

markets (Langfield-Smith 2008). Strategic alliances have become increasingly important as part of a firm's portfolio of strategies and as a source of competitive advantage (Suen 2002). They facilitate the management of uncertainty in a better way than their competitors, exploring new business and developing new resources which limit risk in investments (Hoffmann 2007). Alliances are, therefore, a way to extract greater value from the market place (Shah and Swaminathan 2008).

Strategic alliances have become prolific as methods of inter-organisational partnership. They enable firms to cope with the increasing complexity of learning and of building new sources of competitive advantage to compete successfully in the global economy (Lei 1997; Walter et al. 2008). Companies engage in strategic alliances to accomplish growth and develop competitive advantage. Their competitive position is positively affected by increasing efficiencies, accessing new or critical resources or capabilities and by gaining access to new markets (Kale and Singh 2009).

The literature also cites other reasons for the formation of strategic alliances. Research has shown that entering international markets has become one of the most common reasons to develop strategic alliances (Dacin, et al. 1997). Strategic alliances allow access to required capabilities, gaining knowledge and seeking competitive advantage (Cummings and Holmberg 2012). For example, in the pharmaceutical industry accessing capabilities is key to success (Diestre and Rajagopalan 2012). The acquisition of knowledge is another reason to enter into a strategic alliance; organisations form intensive alliances (R&D) to develop their capabilities and aid economic value creation (Kummar and Nti 1998).

Strategic alliances can be an attractive option when concern centres around relevant costs, the time it takes to develop internal capabilities and the risks associated with mergers and acquisitions (Cummings and Holmberg 2012). Among the reasons for formation are the reduction of risk, the search for economies of scale, technology, the market and as reaction to government pressure (Porter 1986).

Advantages of having various alliances can be the use of shared resources without having to make sizeable investment in order to grow (Hoffmann 2007). The motives to enter into cooperation are to share investment risk or to pursue a variety of operational, commercial,

technological or reputational benefits (Gulati et al. 2012). Reasons for collaboration can be related to accessing new technologies, facing competition, the need to focus on core business, risk sharing and market opportunities (Akintoye and Main 2007).

Other reasons to form an alliance are: product development, market access and power and learning. Advantages include time to market; lower cost; inexpensive and flexible acquisition of required competences; access to distribution channels; and customer intelligence (Callahan and MacKenzie 1999). The motivation is to improve competitiveness and to access complementary competencies that are difficult and time-consuming to achieve alone (Langfield-Smith 2008).

Some strategic motives are also identified, such as: risk sharing, product rationalisation and economies of scale, the transfer of complementary technology or exchange patents, manipulating competition, to conform to host government policy, to facilitate international expansion and vertical linkages. A relationship between the motives to enter a strategic alliance and its contractual form has not been found (Glaister & Buckley 1996). Other authors have mentioned knowledge as a motive to form a strategic alliance, in terms of the creation, transfer or combination of knowledge among partners (Meier 2011).

In the energy sector, the most common reason to develop strategic alliances (mainly in large projects) is to share risk. However sometimes political motivations could exist as way to provide an insurance policy which ensures the successful development of a project. For example, Total selected partners in Iran as a way of reducing political risk. More and more, alliances are developed between international and national companies (IFP 2004).

I have developed the following table in an attempt to link theories for alliance formation, different authors' views and motives.

Table 2-5.- Classification of motives according to different theories

Formation motives	Author	Theoretical fit				
		DM	MA& OP	IEB &RD	IOR	RBV
Entering to international markets	Dacin et al. 1997		X			
Development of the global markets, improve competitiveness	Langfield-Smith 2008		X	X		X
Accessing needed capabilities, gaining knowledge and seeking competitive advantage	Cummings and Holmberg 2012	X	X	X	X	X
Firm's portfolio strategy, source of competitive advantage	Suen 2002	X	X			X
Mimetic pressures	DiMaggio and Powell 1983		X			
Pace of technological developments, access to new technologies, fierce competition, focus on core business, risk sharing and market opportunities	Akintoye and Main 2007	X	X	X	X	
Manage uncertainty, explore new business and develop new resources	Hoffman 2007	X	X		X	X
Share investment risk, pursue benefits	Gulati et al. 2012	X	X		X	X

Product development, market access and power, learning	Callahan and MacKezie 1999	X	X		X	X
Build new sources of competitive advantage, compete successfully in the global economy	Lei et al., 1997 in Walter et al., 2008		X			X
Increase efficiencies, access resources and new markets	Kale and Singh 2009		X	X		X

Source: Adapted from various authors

However, it is worth noting that the reasons to enter strategic alliances, as claimed by different authors, could be grounded in more than one theory. Kogut (1988) acknowledged that perspectives of transaction costs, strategic behaviour and organisational learning could explain the motivation to form joint ventures, but at the same time these reasons could overlap. Assuming that the main goal for alliance formation is to achieve a competitive advantage (as Varadarajan and Cunningham (1995) suggested) the common link for a theoretical fit would be based in its pursuit.

In the energy sector, one of the most common reasons for alliance is to share the risks in large projects. However, political motives are also important. Certain partners can be an ‘insurance policy’ and increase the chances of success. For example, Total chose to partner in Iran primarily because of economic reasons, but also to reduce political risk. Strategic alliances are a way of acquiring new skills and gaining access to sectors or countries. In recent years, the dynamic of alliances between international corporations and national companies has increased in oil-producing countries (IFP 2004).

Alliances in the oil and gas industry have been searching for competitive advantage through different strategies such as economies of scale, economies of scope and as a way to control costs. Strategic alliances are not new in the energy sector - several examples are seen in the industry’s history, such as when BP and Mobil combined operations in Europe to reduce costs and develop synergies and when Texaco and Shell Oil combined their refining operations in the USA in a joint venture (Das and Teng 1999).

In order to understand how the process of forming strategic alliances has been studied and developed, the next section presents a review of the literature pertaining to stages of strategic alliances.

Stages of Strategic Alliances

The literature points to the existence of a number of different stages in the development of a strategic alliance. Specific problems are faced at each of these stages, which acknowledge the evolving nature of the alliance process. While researchers agree that alliances do have different stages, there is no a common understanding on these (Jiang 2008). Furthermore, the question as to how the process of development of strategic alliances occurs has not received much attention from researchers, focussing instead on the antecedents' conditions or structural properties of strategic alliances. Transaction cost and agency theory has been used to compare alternative transaction governance structures. Through organisational sociologists, attention has been turned towards explaining the formation and structure of strategic alliances. They have examined environmental conditions and contingent factors and left aside the opportunity to go beyond the understanding of inputs, structure and outputs. An understanding of the process of strategic alliances has therefore not been developed, thus ignoring the implications for performance and the influence in motivations and decisions on the continuation of strategic alliances along its life cycle (Ring and Van de Ven, 1994).

While some scholars have acknowledged the relevance of the sociological and dynamics aspects of collaboration, there has not been much attention paid to developing research on the evolution of strategic alliances. Different models, including strategic alliances, have been developed in order to explain the process of inter-organisational relationships, such as those by Ring and Van de Ven (1994), Doz (1996), Ariño and De la Torre (1998), Larsson et al. (1998) and Kumar and Nti (1998). The following table summarises some of the models found in the literature and taken as a reference to analyse the different stages and interests of researchers in their development.

Table 2-6.- Models of alliance in the literature

Authors	Approach
Ring and Van de Ven (1994)	Formal, legal and informal social-psychological processes
Doz (1996)	Process of learning
Ariño and De la Torre (1998)	Departed from Ring and Van de Ven (1994) and Doz (1996)
Larsson et al (1998)	Organisational learning, collective action and game theory
Kummar and Nti (1998)	Partners' interaction and absorptive capacities
Das and Teng (1999)	Risk management
Jiang et al (2008)	Stability
Kale and Singh (2009)	Success factors

The main characteristics of these models are described in the following paragraphs. Jiang et al's and Kale and Singh's models are presented in more detail as, in my view, the description of their stages covers the full cycle of the alliance process. These stages are also used as a reference to elaborate on the challenges that face alliances during the process.

Ring and Van de Ven (1994) proposed a cyclical model based on formal, legal and informal social-psychological processes which argues that strategic alliances do not follow a sequential model. The authors proposed three stages: negotiations, commitments and execution, all three connected to assessment based on efficiency and equity. They claimed that strategic alliances are maintained through a balance of formal and informal processes. In acknowledging that their propositions required further elaboration, they considered the

attributes of different contexts where strategic alliances are developed. These included firm strategy, industry structures and the stage in technology and product life cycle. They also acknowledged that context is more complex for international strategic alliances due to differences in factors such as culture and language. Ring and Van de Ven did not elaborate on the conditions where outcomes were considered efficient and equitable (Ariño 1998).

Doz (1996) developed a framework to analyse the evolution of strategic alliances which was based on the process of learning from a grounded theory approach. His model considered four evolutionary cycles: initial conditions (task definition, partners' routines, interface structures, expectations of performance, behaviour and motives); learning (environment, task, process, skills, goals); re-evaluation (efficiency, equity and adaptability); and revised conditions (review of the initial conditions). Doz concluded that successful alliances were highly evolutionary and had a sequence of interactive cycles of learning, revaluation and readjustment; conversely, alliances that failed were highly inertial, with little learning.

Ariño and De la Torre (1998) proposed a model of collaboration in inter-organisational arrangements based on the previous work of Ring and Van de Ven (1994) and Doz (1996). This cyclical model considered four stages: initial conditions (negotiation and commitment), execution (learning), re-evaluation (efficiency and equity) and revision (negotiation and commitment). Initial conditions were defined as the outcome of negotiation and commitment; efficiency as 'if there is no other alternative arrangement that would leave one party better off without the other being worse off' (p. 307); equity conditions as being when reciprocity agreements are achieved. The authors stated that a company would continue in an alliance as long as it was perceived that conditions of efficiency and equity were met.

Larsson et al (1998), interested in contributing to the advancement of understanding how the process of learning develops in strategic alliances, developed a framework. This dealt with the dilemma between being a good partner and winning the 'race to learn' and also with the trade-offs between collective learning and how the outcomes of this learning are shared among partners. This learning enhanced the understanding of failure and success in strategic alliances. The authors believed that the learning process influences the performance of strategic alliances. Based on Hamel's work (1991) on the receptivity and

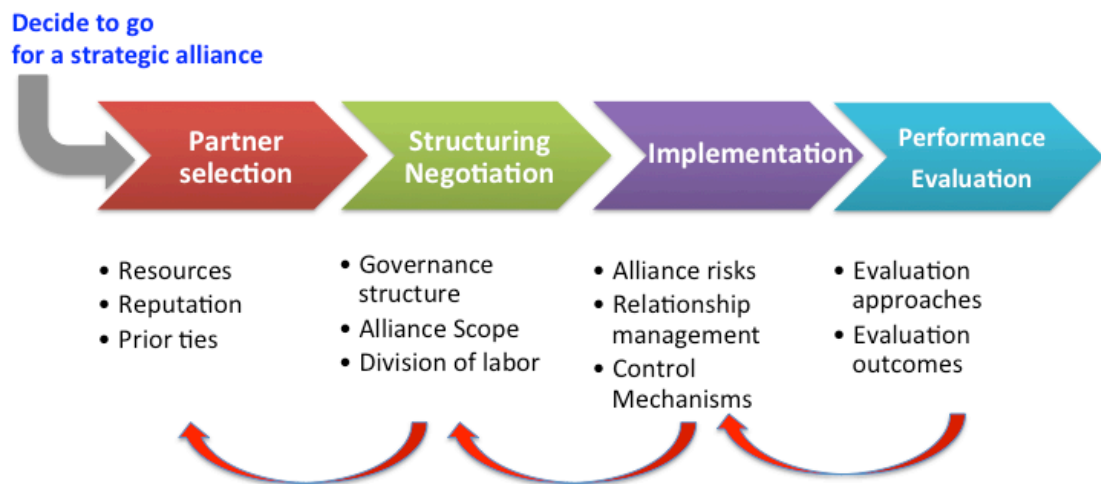
transparency dimensions of interpartner learning and on Thomas's (1976) conflict behaviour model, the authors developed a typology of five strategies. These were: collaboration (highly receptive and highly transparent); competition (highly receptive and non-transparent); compromise (moderately receptive and transparent); accommodation (non-receptive and highly transparent); and avoidance (neither receptive nor transparent). Here, 'receptive' refers to the absorption of knowledge and 'transparency' to the openness toward partners. The framework is based on the theories of organisational learning, collective action and game theory. The authors did not incorporate partner selection issues in their framework in order to simplify their analysis.

Kummar and Nti (1998) proposed a dynamic model based on the interaction among partners. The authors were interested in examining the implications of firms' differences in absorptive capacities in intensive alliances (joint R&D and product development) where the objective was 'to create economic value and acquire knowledge to enhance competencies' (p365). The model considered the pattern of interaction connected to the discrepancies in outcomes and processes. It also fed back from discrepancies to patterns of interaction. The pattern of internal interaction was composed by the collaborative strategies chosen by the partners in addition to the managerial mechanisms implemented to control the alliance.

Das and Teng (1999) developed a framework based on risk management and how it impacts performance. The authors identified two components for risk - relational risk (in terms of commitment and opportunistic behaviour) and performance risk (failure, despite commitment, because of internal or external factors). They suggested four stages of alliance management: selecting partners, structuring the alliance, operating the alliance, and evaluating the alliance. Partners were selected by analysing the risk emanating from the strategic resource fit. Structuring the alliance was developed by considering the risk from the balance between flexibility and rigidity. Operating the alliance looked at the risk from the balance between cooperation and competition. The evaluation stage was related to the risk of the balance between short term and long term orientation. The authors proposed that, if there was not a good fit in the selection of partners, it was better not to pursue the alliance. If there was not balance among the components in the other stages, alliances would be driven to perform poorly.

Jiang et al (2008) proposed a dynamic model which focussed on the dimension of stability (see Figure 2-4) - in doing so, the authors considered the previous work of Das and Teng (1999). Jiang et al defined stability as ‘the degree to which an alliance can run and develop successfully based on an effective collaborative relationship shared by all partners’ (p. 178). I have enhanced this diagram by adding an arrow with the text ‘Decide to go for a strategic alliance’. This is to illustrate that, prior to the life cycle of a strategic alliance, a decision process has to be developed as to whether or not to enter a strategic alliance. I considered it was important to include the decision process to enter a strategic alliance as relevant in order to understand the rational of the alliance. The diagram also includes some arrows moving backwards in order to indicate a dynamic process where stages have to be reviewed to take changes during the development of the strategic alliance into account.

Figure 2-3.- Stages in strategic alliances



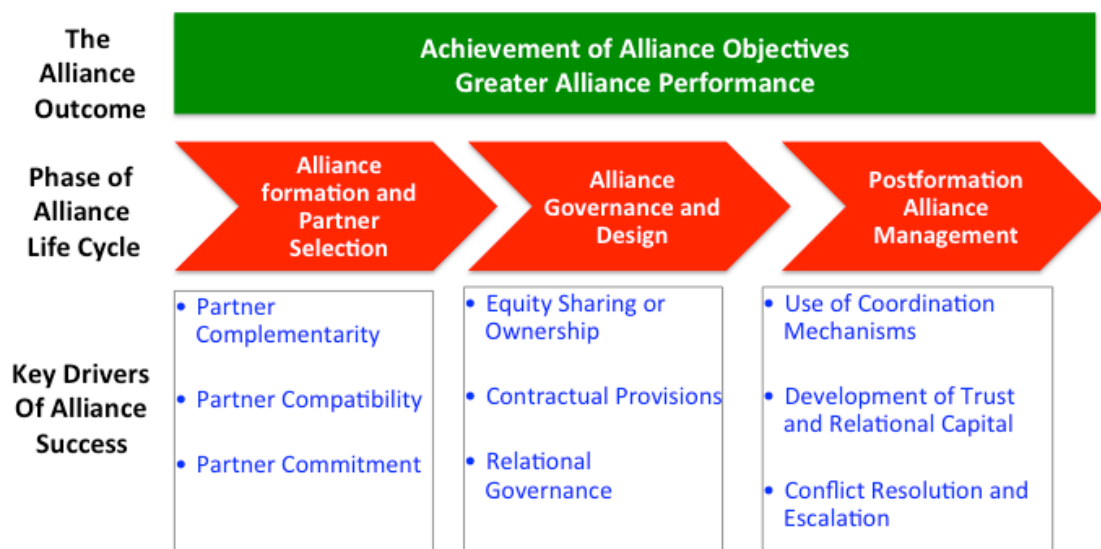
Source: Adapted from Jiang 2008

The above diagram illustrates the four stages considered by Jiang et al. The partner selection stage is considered to be critical - it searches for resource complementarity among partners, assesses their reputation in terms of fairness and performance and their track record where previous experience with partners facilitates relationships. The structuring and negotiation stage relates to the selection of the form of governance in terms of equity. Equity influences the behaviour of partners. For complex relationships, where there is an increased risk of opportunistic behaviour, it is suggested that alliance scope should deal with the number of activities to be developed in the alliance and that division of labour

demands a clear allocation of roles and responsibilities. In the implementation stage, evolutionary factors can have a critical influence on the outcome of the alliance and relational and performance risks can emerge. Relationship management has to be promoted to maintain the development of the alliance, encouraging cooperation and diminishing conflict. Control mechanisms are employed as a tool to organise, coordinate and regulate the dynamics of the alliance. Performance evaluation, where the assessment of objectives takes place, is the final stage. I will elaborate more on performance in the next section (performance evaluation, page 46).

An alternative way to understand the stages of strategic alliance is to look at what have been seen as the key success factors in evaluating the successful completion of each stage. Kale and Singh (2009) identified a number of such factors important to consider in the evolution of the strategic alliance. These include factors: in the formation phase, where a firm decide to enter into a strategic alliance and therefore select a partner; in the design phase, where the partners agree the appropriate governance; and in the post formation phase, where the alliance is managed in order to realise value. The stages are illustrated in the following figure.

Figure 2-4.- Key success factors



Source: Kale and Singh (2009)

The stage of alliance formation, as related to partner selection, has been the subject of extensive research. It has three elements - partner complementarity (resource contribution to the alliance), partner compatibility (working styles and cultures) and partner commitment (willingness to allocate resources in uncertain environments). The alliance design phase deals with choice and implementation of the governance; equity sharing or ownership (alignment of interest through equity, hierarchical supervision, share returns); contractual provisions (mutual rights and obligations, limit information, termination provisions); and reliance governance (reduce transaction costs through trust, less monitoring needed and flexibility in adaptation). Post-formation alliance management, coordination mechanisms (managing interdependence through programming, hierarchy and feedback); development of trust and relational capital. Trust has two components, one structural related to opportunistic behaviour and prevented through shared equity or contractual agreements and the second component behavioural related with the confidence in a partner (Kale and Singh 2009).

As previously discussed, some authors have attempted to develop models to understand and represent the dynamics of strategic alliances. There have been moves towards recognizing the dynamics and evolutionary nature of alliances; however, no common understanding of the stages of strategic alliances exists. The next subsection presents suggested considerations during the stages. For this purpose, Jiang et al and Kale and Singh's models are used in a complementary form, as illustrated in the following figure.

Figure 2-5.- Stages of alliances revisited



Considerations during the process

Partner selection

The selection of a partner is a critical stage; the expectation is to find someone who can fit in terms of resources, goals, incentives and strategies (Jiang et al. 2008). The quality of the

decisions made at this stage has an influence on the performance along the cycle of the alliance; partner selection requires a careful screening of the options available and demands time investment (Dacin et al. 1997). Investing time during this stage could contribute to overcoming problems in the later stages of the alliance which, even with good managerial skills and capabilities, could be very challenging (Cummings and Holmberg 2012).

Elements highlighted as being relevant to partner selection include complementarity, compatibility, and commitment (Kale and Singh 2009). Those aspects suggested as critical when selecting a partner are: reputation, experience, trustworthiness, capabilities and potential contributions to the alliance and the relevance of resource complementarities and learning during the process of selection in order to predict the potential behaviour of a partner in the following stages (Jiang et al 2008). One reason for the failure of an alliance is the difference in skills among partners, making complementarity a relevant factor in selection. The performance of the alliance could be jeopardised if one partner does not have the appropriate skills to develop an allocated task (Doz 1996).

Other authors have suggested looking at the degree of compatibility in national origins, organisational forms and relative organisational status (Gulati et al. 2012). A careful examination of differences in national and corporate cultures, past associations, strategic interests or intents and organisational norms and structures is necessary (Cummings and Holmberg 2012).

Depending on the scope of the alliance, the international or economic development of the countries where it takes place could demand attention. For example, international alliances require a deeper analysis of cultural differences and distinct ideologies related to economic and political structures. Expectations vary according to culture - for example, Asian cultures are more long-term oriented and have a higher interest in community benefit (Bleeke and Ernst 1991, Dacin et al. 1997).

Some industries face specific challenges when selecting a partner. In the Biotechnology industry, a difference in size and resources among partners could result in issues of value appropriation. Prescriptive signals should therefore be considered while selecting a partner, such as looking at the incentives and skills of the potential partner for value appropriation.

A partner with skills in value creation could be a potential candidate for value appropriation (Katila et al. 2008).

Governance Design

The purpose of this stage is to design and negotiate the terms and conditions as regards how the alliance will operate. The primary challenges are on the degree of flexibility or rigidity imposed and on the allocation of roles and responsibilities between the parties involved. The extremes could be negative, too much flexibility could result in opportunistic behaviour in later stages (Das and Teng 1999). Having an excessive legal structure and excessive monitoring of activities are noted among the reasons for ending an alliance. Therefore, during the governance design, some issues could emerge among the parties involved in the negotiations form of specialist roles. It is suggested that specialists interact with their counterparts according to their specialism as the difference in behaviours relate to professional norms. Negotiations are led by managers in order to have more effective transactions (Ring and Van de Ven 1994).

Implementation and Management

Previous stages are relevant to the implementation and management of an alliance in terms of the freedom that managers have to deal with operational situations (Ring and Van de Ven 1994). Some of the issues that alliances face include loss of control, the cost and difficulty in combining processes and cultures of partner companies and communication problems (Callahan and MacKenzie 1999).

During the operation of the alliance, administrative controls not only affect procedures and operational tasks, they also have an impact on the partners' willingness to collaborate. In a dynamic context where strategic alliances develop, relational harmony is important to face persistent conflicts and opportunistic behaviours. Excess rigidity or insufficient relational harmony could be problematic for the strategic alliance development (Cummings and Holmberg 2012). The challenge involves finding the balance between competition and cooperation. Private interests are inherent considering that each partner entered the alliance to pursue the development of competitive advantage. (Das and Teng 1999).

A key concern in cooperation is that the partner behaves according to the agreements established related to contribution or payoffs. Possible outcomes are either the partner

contributes less or claims more in terms of benefit. As a result of this, partners reduce their investment in the alliance which deteriorates and drives it to end (Gulati et al. 2012).

Discrepancies among partners and the way these are managed could impact the alliance (Kummar and Nti 1998). The continuous involvement of managers is key (Doz 1996) and human resource (HR) practices affect strategic alliances. These practices include job rotations, site visits, meetings and other activities that facilitate engagement, improve learning and aid communication (Cummings and Holmberg 2012). Trust and adaptability are fundamental during this stage; changes in the agreement during the implementation process are linked to attempts to identify opportunistic behaviour and partners' change in commitment and trust (Gulati et al. 2012). The context then changes, which is perceived and impacts in different ways on the parties involved. The dynamics of learning and experience throughout this stage are important. These will dictate how partners address and renegotiate the adjustment of the alliance in order to accommodate change. Cumulated interactions and the perception of equity could determine the path of the alliance (Ariño and De la Torre 1998).

Performance evaluation

One of the challenges in strategic alliances is how to qualify performance. Some authors regard a strategic alliance as successful if partners' objectives have been met and if capital costs have been recovered (Bleeke and Ernst 1991). However, there does not seem to be a consensus on the comparability and reliability of performance measures for strategic alliances (Geringer and Herbert 1991). Different cultures have distinct perceptions on performance expectations. For example, the Japanese are more long-term oriented and include non-financial goals in determining performance (Dacin et al. 1997). The next section elaborates on the various aspects of performance.

Performance of Strategic Alliances

Performance has been one of the most significant topics of interest for researchers on strategic alliances. The literature seems to have been concentrated on international management and the secondary area of joint venture. This section will therefore mainly focus on research conducted in that area. I will assume that joint ventures are part of

strategic alliances. Authors such as Christoffersen (2013) started to introduce the term International Strategic Alliances as an umbrella term to include the research conducted in the area of joint ventures.

Anderson's (1990) study provided an insight to the research interests of joint ventures. In earlier studies (prior to 90's), he stated that he had reviewed articles and books over the previous two decades. He found that the topics of interest included reasons to undertake a joint venture, narratives of specific joint ventures and selection of partners. He also found there were few studies on performance assessment and so concluded that the formation of joint ventures received more attention than their performance (1990).

Research interest in strategic alliances has evolved over time. Christoffersen (2013) usefully conducted a review of research on the performance of international strategic alliances, stating that early studies had focused on the broader aspects, such as motivation to collaborate and mode of entry. Some of them considered performance using as antecedents: number of partners, joint venture location and control. Parkhe (1993, cited in Christoffersen 2013 p. 66) criticised these studies, arguing that constructs came from hard data and thus setting aside the soft concepts such as trust, forbearance, reciprocity and opportunism. Later studies included non-equity alliances and performance and its antecedents. In his review study on factors influencing international joint venture performance, Robson (2002, cited in Christoffersen 2013 p. 67) found that behavioural factors (trust, commitment and conflict) had a relevant impact on performance. Nippa et al. (2007 cited in Christoffersen 2013, p. 67), in their review, integrated existing concepts into a framework of broad headings concerning success factors: parent attributes, parent fit, relationship management, governance and external environment. Ren et al. (2009, cited in Christoffersen 2013, p. 67) 'explored a larger number of potential performance antecedents: bargaining power, commitment, control, trust, conflict, co-operation, cultural distance, justice, goal compatibility and conflict resolution mechanisms'. The evolution of research specifically related to performance shows that interest has moved towards including and increasing soft elements in the understanding of performance.

One of the strongest criticisms of international joint venture performance research is that it is fragmented and has not been able to provide an explanation for the success or failure of international joint ventures (Ren et al. 2009).

It seems that researchers will remain interested in the performance of strategic alliances. Gomes et al. (2014) argued that company performance in the post-agreement phase of strategic alliances has captured research attention and was the second most researched theme in top management journals. The authors believed that performance would remain an attractive topic due to the intensity of competition and the high level of failure. This provides some insight as to the attention focused on researching the performance of strategic alliances. It is firstly important to look at the meaning of performance and how it can be measured - this is presented in the following subsection.

Definition of performance

The definition and measurement of performance is complex and different views and interpretations as to its meaning exist (Dussauge and Garrette 1995). When talking about performance, there is an immediate temptation to think about success and failure. Hatfield et al. (1998) in their review found that some authors have tried to identify success factors, however there has not been agreement reached as to the meaning and measurement of performance.

Yan and Zeng (1999, cited on Ariño 2003, p. 67) believed that there was no a common understanding of strategic alliance performance. Some authors have attempted to develop different interpretations of its meaning. Christoffersen (2013) defined performance 'as the net present value that partners obtain from participating in the alliance' (p. 4).

At this point, is useful to define performance, performance indicators, success and failure. According to the Oxford International Business Dictionary (Market house, 1998), performance is an 'act process, or manner of performing or functioning' (p. 641). Performance indicators are 'indicators that measure a company's performance, often divided into strategic, operational, behavioural, and ethical' (p. 641). Success is the 'accomplishment of an aim; favourable outcome... attainment of wealth, fame, or position... successful thing or person' (p. 852). Failure is defined as 'lack of success; failing... unsuccessful person or thing... non-performance... breaking down or ceasing to function... running short of supply' (p. 300). As can be seen from this, some of the dictionary definitions for performance are not precise. The definition is explained by using the same words and is subjective. Performance indicators include four dimensions that can

be interpreted as objective and subjective measures. Success is defined in terms of achievement, while failure is defined as being opposite to success.

Krishnan et al. (2006, cited in Ren 2009) argued that performance could be measured in terms of survival, financial output (return on investment, market share), overall satisfaction, achievement of individual or joint goals and learning.

According to Commons (1931), performance was considered as one of the three dimensions of choice and defined as ‘the exercise of power over nature or others... performance means either rendering a service, compelling a service, or paying a debt’ (p. 654).

Das and Teng (2001), defined performance in terms of achievement of the objectives of the partners. They believed that the success of a firm depended on the actions taken in a competitive environment - and additionally, for a strategic alliance, on the actions of each of its partners. The authors defined performance risk as the factors that diminished the chances of achieving the strategic objectives, despite full cooperation of the partners. Relational risks were defined as those resulting from the relationship between partners.

One of the issues in measuring performance in terms of objectives is that partners could have different expectations (Glaister and Buckley 1996). Das and Teng (2001) identified factors that influence the achievement of objectives. These included the external environment, where the influence of government and political risk should be considered, competition and the actions of competitors and the internal environment where competence and being able to work together could impact objectives. Some authors have attempted to measure performance; this is presented in the following subsection.

The Measurement of Performance

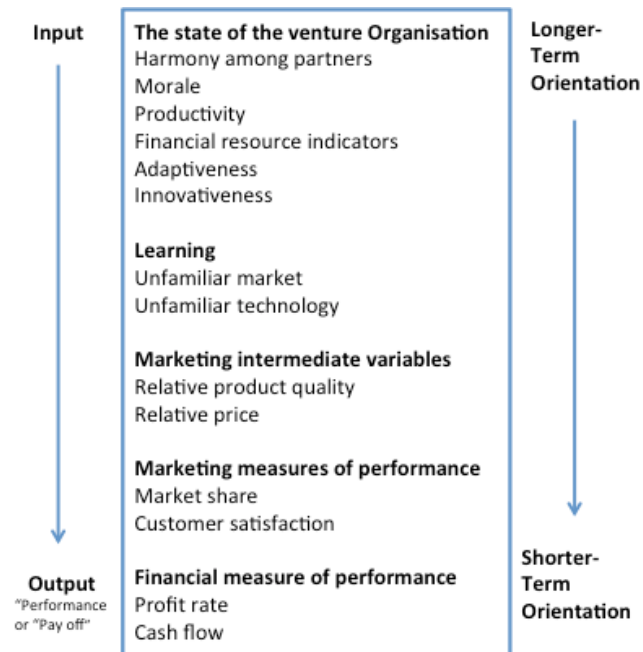
The principle of measuring performance departs from the idea that ‘if you can measure something, you can’t talk about it’ (Tomlinson 1970, p. XV). However, if it can be assumed that there are difficulties in reaching a common agreement on the meaning of strategic alliances and performance, it is to be expected that the question as to how to measure performance will not have a simple answer. A simplistic approach would be to suppose that joint ventures’ performance can be measured in the same way that a division

of an organisation is assessed, i.e. to follow the traditional approach of financial metrics. However, a division and a joint venture are inherently different. Joint venture's need to balance multiple interests and there could often be conflict of interest between parents; they are developed in uncertain and risky environments, organisational politics play a more unbalanced role for joint ventures. The visibility of managers at the parent level in a joint venture is less than in a division (Anderson 1990, p. 20).

One way to shed some light on how to assess performance of a joint venture would be to consider how organisations assess performance with the intention of setting a baseline. Unfortunately, measurement of organisational performance has been seen as controversial. The controversy was rooted in a lack of clarity, both as regards what should be considered as an indicator or output of performance and also what inputs determine performance. It seemed that researchers and managers tended to confuse inputs and outputs. In addition, the controversy was related to the organisational context and its stage in its life cycle. (Anderson 1990).

Despite the issues surrounding performance, there is a common understanding that it has three dimensions. These are: stability vs flexibility; well-being of individuals vs that of the organisations; process vs outcome. However the challenge was how to separate and define inputs and outputs. Fortune Magazine developed a study on how business people think of performance. It identified a range of metrics, mostly financial, along with a desire to have stable management. The latter is a more subjective and long-term performance metric. This reflects the expectation to have a 'package of inputs and outputs, weighted over time' (Anderson 1990 p. 22). Several researchers agreed with the idea of having a package but at the same time acknowledged it was 'cumbersome, difficult and subjective' (p. 22). Another study of a Conference Board survey of top executives concluded that financial measurement is just one part of the assessment. There was also a need to include qualitative factors, something that takes us back to the difficulty of setting the metrics and also highlights subjectivity where issues are value-based (Anderson 1990). What it can be concluded is that theory and practice share the view that a 'package' approach is required. Anderson developed a classification of performance measurement according to an input-output progression and a long-short term orientation. This is illustrated in the following figure.

Figure 2-6.- Input-Output continuum



Source: Anderson (1990)

Input is a measurement of the health and viability of the organisation, which are not the most common goals. Output is defined in terms of results which are mostly articulated as hard metrics. An organisation may perform well from an output perspective, but input metrics should be considered in the long term for a good performance to be sustainable (Anderson 1990).

Hatfield (1998) usefully identified different approaches to measure the performance and success of joint ventures in existing research. This research included the work of Harrigan (1988) on duration and survival in measuring success; and Killing (1983) who divided performance measures into managerial assessment, liquidation and major reorganisation. Killing considered joint ventures as failures if they were liquidated or suffered a major reorganisation due to poor performance. Beamish (1987) considered that performance was measured in terms of the satisfaction of partners.

Another way to interpret performance is to borrow from strategy literature. This, considers three levels of performance related to goals - financial performance, operational performance and organisational effectiveness. Financial performance is relevant if partners

have explicit financial goals. Operational performance focuses on key operational success factors. Organisational effectiveness is achieved when organisational goals are accomplished, taking multiple interests into consideration. This third goal is considered the most comprehensive as it can accommodate financial or operational performance; however, how to measure it remains an issue. (Ariño 2003)

Several authors have attempted to measure performance in different ways, such as financial measurement, survival and duration. One of the issues in applying financial measurement is that joint venture financial information is often not available, being embedded in the consolidated financial statements of an organisation. On the other hand, survival and duration are affected by non-performance factors (Hatfield 1998). Gomes-Casseres (1987) identified reasons for termination of a joint venture which are not related to its performance. Hatfield (1998) developed a study which evaluated the adequacy of using partner satisfaction or goal achievement as a way to measure performance. Goal achievement was found to be the most adequate metric as partner satisfaction is determined by both partner goal achievement and by survival.

Christoffersen (2013) identified five performance measures and tier antecedents within the literature on performance. Performance measures were: subjectivity, stability, accounting, cumulative abnormal returns, and external evaluation. Subjective measures can be divided into overall satisfaction and achievement of the partners (Ariño 2003, Geringer and Hébert 1991). According to Christoffersen, the problem with this division is that some subjective measures can be classified under both categories. Stability considered measures related to exits from markets, changes in equity, contracts, takeovers from one of the parents or a third-party and alliance dissolutions. Accounting measures could be in terms of percentage growth or financial ratios. Cumulative abnormal return (CAR) refers to how markets react to the announcement of the alliance and how the perception of creation or destruction of value is judged. External evaluation is the assessment developed by parties outside the alliance. The antecedents were: behavioural attributes (commitment, trust, co-operation and conflict), dissimilarities, national cultural distance, organisational cultural distance, relatedness and experience.

As discussed in the meaning of success, people understanding the term differently, especially in strategic alliances. For instance, Bleeke and Ernst (1991) claimed that, to be considered successful, an alliance requires the partners to achieve their respective objectives and recover their costs. A successful alliance therefore has to pass two tests: 'both partners achieved their ingoing strategic objectives and both recovered their financial costs of capital' (p. 130). The study developed by Bleeke and Ernst relates both tests to financial results. The first test, related to the achievement of strategic objectives, can be viewed either objectively or subjectively.

One of the challenges in qualifying success or failure is to have a common understanding of performance and the way it is measured. Different ways to measure performance have been attempted using objective and subjective measures. Geringer and Herbert (1991) usefully consolidated different measures used by various authors for International Joint Ventures. These included: profitability, growth, cost position, survival, duration, instability of (significant changes in) its ownership and renegotiation of the joint venture contract. Problems with these measures are that often data is not reported, unavailable or included in consolidated corporate data. It is also acknowledged that financial measures evaluate only one dimension of performance. Furthermore, measuring performance in terms of parents' satisfaction is imprecise and biased. Bamford et al (2003) suggested that, due the complexity and variability of strategic alliances, it is better to define and agreed the meaning of success or failure and the way performance is going to be measured on a case-by-case basis.

There are other factors that need to be considered when measuring performance. Das and Teng (1999) identified the sources of performance risk as being environmental factors, changes in government policies, war and economic recession, competition and demand fluctuations; and internal factors such as lack of competence and, sometimes, just bad luck.

Das and Teng (1999) argued that a practical approach in measuring performance is to assess if the partners have achieved their objectives. They distinguished between short-term and long-term metrics - the more focus placed on results, the more pressure for the alliance and the greater the chances of termination. Short-term metrics were related to financial and

market while long-term metrics promote cooperation and consider soft metrics.

Larsson et al. (1998) challenged the use of termination as an effective performance metric. He argued that this can be misleading, as alliances demonstrating a good performance could still be terminated for other reasons, such as achievement of the original goals at a faster pace than expected, or because the partners' interests changed. Gulati (1998) suggested that strategic alliances sometimes continue because the exit costs are high, but this does not equate to good performance. Larsson et al. suggested paying more attention to the learning process, arguing that partners needed to overcome various challenges through cooperation before the alliance takes place. Stonehouse and Snowdon (2007) believed that knowledge creation is part of the learning process and thus a way to improve performance. In their study, Chan et al. (1997) found that horizontal alliances related with transfer or pooling technical knowledge seemed to create more value than marketing alliances. This suggests that organisations which focus on their business and complement operations with the technical skills of a partner create more value.

Kale and Singh (2009) argued that one way to increase the chance of success is by having complementarity among partners from a resource-base perspective. However, Beamish (1987 cited in Kale and Singh 2009) considered that, for alliances to perform better, compatibility and commitment were also required.

Harrigan (1988, cited in Contractor & Lorange) observed and analysed three dimensions in the measurement of performance: survival, duration and success.

Dissimilarities play an important role in the performance of strategic alliances. For instance: experience, age, strategic scope, strategic content, goals, ownership type and reputation, size and cultural dissimilarities (at national or organizational levels) and relatedness. Size dissimilarities relate to the complexity, structures and styles of organisations and damage alliance performance because they 'give rise to a host of other dissimilarities' (Christoffersen 2013 p. 74). Joint ventures between large and small firms experience difficulties because of idiosyncratic incentives for partners, cultural variations and asymmetric policies in information distribution. Relative size affects administrative protocols which in turn leads to problems in understanding. This increases the risk of opportunistic behaviour, diminishing the incentive for cooperation (Christoffersen 2013).

A common belief among scholars is that performance measurement has been studied in a fragmented way. A better understanding of the reasons for success or failure is therefore required (Ren 2009).

The performance of a strategic alliance seems to be a complex area and when organisations enter into more than one alliance, this complexity seems to increase. According to Hoffman (2007), the most relevant issue for an organisation in several alliances is the performance, in terms of success or failure, of the alliance portfolio. A review of the literature in alliance portfolio is presented in the following sections.

Alliance Portfolio

Some authors have attempted to define the term alliance portfolio or network. It can, for example, be considered as a series of alliances with two or more partners (Das and Teng 2002). However, other authors have encountered difficulties when conducting research related to the definition and understanding of an alliance portfolio. One issue concerns the level of analysis. It questions, from a strategic management approach, if the alliance portfolio should be positioned at the business or corporate level. A second issue arises if a portfolio includes active and inactive alliances. It is important to acknowledge that managing a transnational alliance portfolio requires increased management competences and more resources (Vapola et al., 2010).

Wassmer (2010) conducted a review of the literature on alliance portfolios, and usefully identified the various theoretical approaches taken. These included social network theory, organizational learning in general, exploration/exploitation framework, a resource-based view of the firm, dynamic capabilities, knowledge-based view, relational view, evolutionary economics, transactions cost economics, agency theory, contingency theory, coevolutionary perspective, contract theory, real options and resource dependency theory.

Wassmer (2010) organised the literature into three areas: the emergence, configuration and management of alliance portfolios. Emergence was related to the reasons to build and maintain a portfolio; amongst these reasons were the management of risk and uncertainty, the learning process from multiple alliances and access to network resources. From a network viewpoint, more opportunities could be identified with current or new partners, and from a competitive perspective to build a portfolio as a way to develop offensive and

defensive strategies. Wassmer (2010) found that the rationale to build a portfolio could have two perspectives, the firm level or the manager level. The firm level is related to the strategic position of the company and agency issues could occur at the manager level. The portfolio configuration has several dimensions such as size (in terms of number of alliances and partners); structural (breadth, density and redundancy); relational tie (strength of alliances); and partner characteristics. Configuration was perceived as a complex concept and there was debate around the importance of size. Some authors believed that the bigger the better, while others argued that size increased the complexity of the portfolio. The management of an alliance portfolio had two paths, the creation of capabilities and the tools to manage a portfolio. Alliance capability referred to the ability to identify partners and to initiate and engage in the management of the alliances. Alliance experience was considered relevant in developing capabilities, but also required having a good learning process where experiences could be shared among alliances. The tools to manage a portfolio required having a more integrated approach to the portfolio as a whole and taking other factors such as partner/portfolio fit, into consideration.

Vapola et al. (2010), in their study of the options to manage an alliance portfolio for multinational companies (MNC), found three approaches based in two dimensions. These were partner integration and partner heterogeneity and the authors argued that the selection of an option is related to the international strategy of the MNC. The proposed options for portfolio management were: a) highly integrated global alliance portfolio management; b) local demand multi-domestic heterogeneous alliance portfolio management; and c) dual-focused transnational alliance portfolio management.

According to Vapola et al. (2010), highly integrated global alliance portfolio management is motivated by economies of scale, having standardised solutions and processes, with high levels of control and centralisation of the decision making process. and as a second best option to a full internalization of the business, thus requiring a high level of integration with partners and a low level of heterogeneity. The local, demand-oriented, heterogeneous alliance portfolio management option's purpose was to meet the needs of local markets. Solutions and processes were particular to the markets, as were the selection of partners. The portfolio was consequently characterised by partner diversification and a low level of integration and simple financial controls. The flexibility of this option allowed for a high

degree of responsiveness to local opportunities. The dual-focused transnational alliance portfolio management option had a disperse configuration of assets and capabilities and allowed different contributions from partners. Joint knowledge was developed among partners and expanded to the MNC. Because of the diversity, a complex process for cooperation and coordination was required, in addition to a shared decision making process.

Some authors suggested that the assessment of a portfolio should be systematic, continuous and developed at the individual alliance, business unit and corporate level (Wassmer 2010). Kale and Singh (2009) suggested that in order to increase the success of a portfolio, three elements were required - alliance experience, a dedicated alliance function in charge of the portfolio and a learning process to facilitate knowledge exchange among the alliances in the portfolio. The authors also suggested that further research into portfolio alliances was necessary. Alliance portfolio is another fundamental element which needs to be considered in the development process of strategic alliances.

Gaps and opportunities in research

According to various authors, the failure rate of strategic alliances is high (Dacin et al. 1997; Das and Teng 1999; Langfield Smith 2008; Walter et al. 2008; Kale and Singh 2009; Gulati et al. 2012). The failure rate can be attributed to underperformance and there is therefore a need to better understand the performance of alliances (Hong 2009).

There are several gaps in the literature of strategic alliances that have been identified as opportunities to develop research in this area, which, according to some authors, remains fragmented (Oliver 1990, Hong 2009, Ren 2009). More attention has been paid to certain types of strategic alliances such as joint ventures, with much less research into non-equity alliances (Culpan 2009). Thus, there is a need for a more integrated and inclusive approach that could focus on the development process of strategic alliances (Ren 2009, Doz 1996, Larsson 1998, Gulati 1998).

Insufficient literature on strategic alliances takes a process approach (Ariño 2003, Mainela and Puhakka 2008), but process theory can assist in understanding how and why strategic alliances have been developed in the energy sector (Langley et al. 2013). The narrative surrounding strategic alliances can also aid an understanding of their performance by constructing cultural visions among different individuals who has been involved in their

development (Reichie et al 2010, Giorgi et al 2015).

As has been shown by the review conducted in this chapter, there are different understandings and perceptions of the fundamental parts of strategic alliances in terms of meaning, types, process and performance; the common factor is variety and subjectivity. Conventional processes for the development of strategic alliances fail to integrate the wider elements which influence alliance performance. There are fundamental elements that have not been included in the research of strategic alliances, such as the decision to enter the strategic alliance and the alliance portfolio. It seems that the effect of these elements on the performance of strategic alliances has not been adequately considered. A qualitative approach could help better understand the performance of strategic alliances. This could provide new or complementary insights into the development and processes of strategic alliances (Culpan 2009, Christoffersen 2013, Parke 1993) by increasing qualitative studies in the field (Gomes 2014).

Furthermore, I have not found a specific study which attempts to understand the performance of strategic alliances in the energy sector. This presents a new challenge due to the idiosyncrasies and influences of the energy industry (Doz 1996). The development of activities in the energy sector are strongly influenced by political, economic and social factors as natural resources are a matter of national or public interest (IFP 2004; Duval et al. 2009; Yergin 2012). There is, therefore, a need for empirical research to enhance the understanding of strategic alliances through the lens of participants involved in the strategic alliance processes (Doz 1996). This research would capture their view and concerns in the field (Jiang et al. 2008), taking up the challenge to strengthen the relationship between academia and practice (Gulati 1998). It would also improve understanding which would be useful in the improvement of managerial practice in the energy sector (Ariño 2003, Corley and Gioia 2011).

In summary, success rates in strategic alliances are not high. Current literature does not contain studies of these topics within the energy sector. This presents an opportunity to understand and learn how strategic alliances are conducted and how they can work better in order to increase their chances of success.

Filling the gap

As seen previously, there is a need to understand the performance of strategic alliances in the energy sector. Research in the field is extensive but fragmented; different theories have been used to study strategic alliances, but, so far, process theory has not been applied in the energy sector. Therefore, I propose to develop a study to understand the performance of strategic alliances in the energy sector. This will take a cultural and a process theory approach as a method of analysis through accounts of individuals with experience in the development of strategic alliances in this sector. A process theory approach is applied to understand why and how phenomena (such as strategic alliances) change or remain stable over time. The weakness found in most of the studies of performance in strategic alliances is that these have taken a variance theory approach to understanding the ‘what’ of strategic alliances, e.g. antecedents, dependent variables and outcomes. They do not consider the ‘how’ or implementation dimensions. Variance theory deals with covariations among variables; it tends to ignore time by compressing it into variables, reducing its role in comparative statistics and therefore ignoring the temporal flow of organisational life (Langley et al. 2013).

Alliances are dynamic systems of adaptation and evolution: they are suitable for co-evolutionary study because, over the course of their life cycle, they are exposed to many types of destabilizing factors, regardless of how well they were conceived (Inkpen and Currall 2004). Therefore, strategic alliance research requires an understanding of strategic change. Strategic change is a continuous process which possesses a consistent pattern regardless of the context. One typical feature of the process dimension is that strategy does not move forward in a direct, linear way. It is not an easily identifiable number of sequential phases, it is a continuous, iterative and uncertain pattern (Whipp and Pettigrew 1992).

Considering trust as a key element in the development of a strategic alliance, and using Møllering’s (2012) definition of trust, a difference between ‘an alliance’ and ‘to ally’ can be suggested. The latter is a process, and can be studied in its own right. This changes the focus of interest to organisational process rather than organisational state (Møllering 2012). The focus could be complemented by the difference between collaboration and collaborative alliances, where the former refers to the process and the latter to

organisational forms (Gulbrandsen and Moe 2005).

Process research is focused on understanding how things evolve over time and why they evolve in this way (Langley 1999, Langley et al. 2013). Taking this into consideration, there is an opportunity to study the process followed in the development of strategic alliances in the energy sector, trying to understand how they are developed and why they fail.

The development process of strategic alliances is conventionally described in four stages: partner selection, governance design, implementation and management (Jiang 2008, Kale and Singh 2009). However, this model provides insufficient understanding of the complexity of strategic alliances' performance. It could, therefore, be expanded into a multi-perspective model by taking a cultural approach and utilising process theory to understand how strategic alliances emerge, change, unfold and evolve over time (Langley 1999; Langley et al. 2013; Giorgi et al 2015).

This would contribute to the understanding of the performance of strategic alliances.

My contribution lies in taking a cultural approach and utilising process theory to focus much more explicitly the performance of strategic alliances into a holistic process model. Process theory will be applied to look at how strategic alliances are developed. The research subjects will consist of experienced managers in the energy sector; the aim will be to elicit perspectives on the temporal progressions of activities in developing strategic alliances (Langley et al. 2013).

The role of people with experience in strategic alliances is relevant to the study because, as argued by Powell and DiMaggio (1991, p.254), 'without actors, without subjectivity, there is no way to account for change'

Finally, the study has practical implications for preventing problems and presenting possible solutions to make strategic alliances work more effectively in the energy sector.

Conclusions

Organisations enter strategic alliances for different reasons - one attribute of strategic alliances is that each of them is unique. Despite there being no consensus among

researchers on the rate of failure of strategic alliances, the general understanding is that failure is high.

Developing the literature review found that strategic alliance is a form of collaboration among companies to develop competitive advantage and better face the challenges attributable to competition, knowledge and technology. More often the collaborative business model is used, but despite the popularity of strategic alliances, the success rate is not high. Thus, there is a need to understand strategic alliances in order to increase their probability of success. Measuring strategic alliances' performance is a difficult task. This is due to measuring performance primarily from a financial perspective. Due to strategic alliance heterogeneity, it is suggested that performance measurement is agreed on a case-by-case basis. Where organisations enter into more than one strategic alliance, the success of any single alliance is not sufficient to understand the performance of an organisation's network or portfolio.

As explored in this literature review in the field of strategic alliances, meaning, types, process and performance have different meanings and interpretations amongst scholars. On the one hand, this is a reflection of the complexity embedded in the arena of strategic alliances and, on the other, highlights the relevance of the subjective element in research into strategic alliances. This increases the need to understand strategic alliances from the perspective of people with practical experience in the field within the energy sector.

There is insufficient literature on strategic alliances which takes a process theory approach. Conventional processes for the development of strategic alliances fail to take account of the wider elements which influence the alliance's performance. Therefore, a study taking a cultural and process theory approach to work much more explicitly the performance of strategic alliances into a holistic process model, could contribute to the understanding of performance in strategic alliances within the energy sector.

CHAPTER 3: Methodology and Methods

Introduction

The purpose of this chapter is to explain the methodology and methods followed in this thesis in terms of my research design and the rationale behind its selection. A variety of sources related to methodology and methods were reviewed. A methodological framework developed by Blaikie (2009) was selected as the foundational philosophical underpinning for this thesis, focusing as it does on rational research design. The chapter begins by describing the framework used to develop the research design which is adapted from a framework by Blaikie (2009) and recommendations by Saunders (2012). This adapted framework is used to set the context of this research and to explain the decisions I made and my justifications for making these.

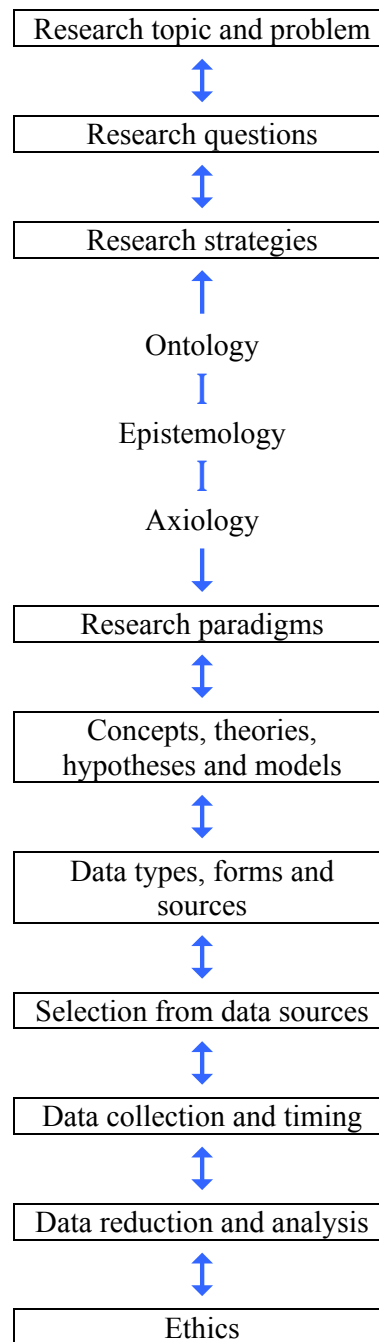
Research Design

My process followed various iterations; initial decisions were reviewed and these changes impacted later decisions. This proved to be useful to confirm consistency with the research philosophy (Blaikie 2009).

The research design was how I planned to answer the research questions. It contains the objectives derived from these questions, specifies the sources from which data was collected, how it was collected and analysed and presents ethical considerations (Saunders 2012).

The research design incorporates the decisions made for: the selection of the research problem and the researcher's motives and goals (aims); the research questions; the research strategy, based on ontological and epistemological assumptions, and axiology; the research paradigms; relevant concepts, theories, hypotheses and models, data types, forms and sources; selection from data sources, data collection and timing; and finally a section on ethics (Blaikie 2009, Saunders 2012). The research design framework is illustrated in the following figure:

Figure 3-1.- Research design framework



Source: Adapted from information of Blaikie (2009) and Saunders (2012)

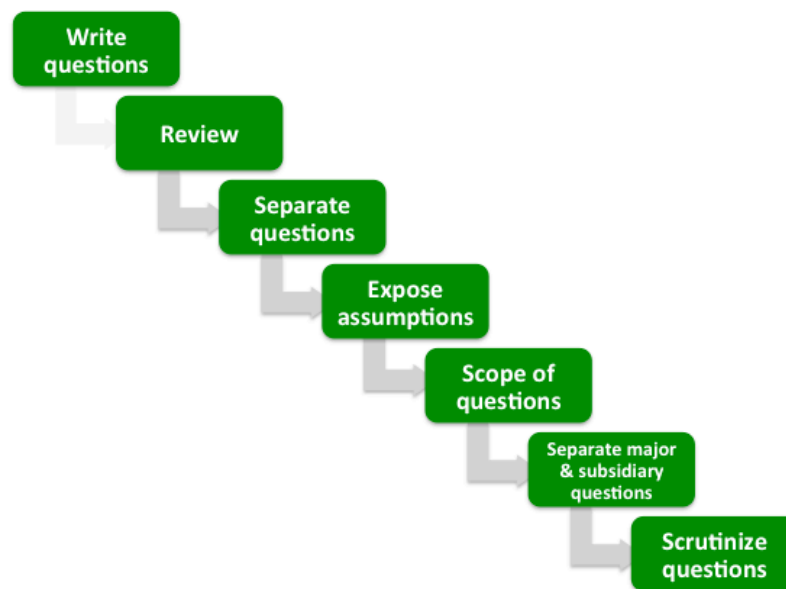
This framework begins with the research topic and problem. Already discussed in the introduction, here I focus from the second step ('research questions') of the framework

onwards. This, along with the following steps, are explained in the following sections.

Research Questions

Following Blaikie's recommendations for the development of research questions, a seven-step process was used:

Figure 3-2.- Research questions – the development process



Source: Adapted from Blaikie 2009

This process was used to identify, analyse, organise and select the research questions. I began by writing down the questions related to the research problem which came from my experience in the field and the literature review. At this stage, the questions remained uncensored, although they were reviewed, grouped and consolidated. The questions were articulated according to what, why and how. The possible assumptions of each question was reviewed and some others added, and their scope was examined in light of time and resources available. Questions were then separated into major and subsidiary, a categorization which assisted reflection as to the aim of the research and building a framework. Finally, the following research questions were identified (more details can be found in Appendix 3-1):

- How and why have strategic alliances been developed in the energy sector?
- How and why do strategic alliances succeed or fail?
- Why do firms engage in strategic alliances despite low success rates?
- How can we create more effective strategic alliances in the energy sector?

These research questions were the foundation to address the problems associated with the issues of strategic alliances, and by so doing to accomplish the main purpose of this research that is to understand the performance of strategic alliances from a process theory approach. The four questions follow a sequence that help to understand strategic alliances, first by seeking to understand how and why strategic alliances have been developed in the energy sector, then considering the failure rate of strategic alliances to explore how and why they succeed or fail, why firms engage in strategic alliances despite low success rate, and finally how we can create more effective strategic alliances in the energy sector. The findings of these research questions gave shape to the process represented in a holistic dynamic multi-perspective framework that is presented in the discussion chapter.

Research Strategies

Research strategies are pivotal as they direct how the research questions are framed answered. The differences among them are termed the logic of enquiry and its particular combination of ontological and epistemological assumptions. (Blaikie 2009)

The decision to use a research strategy was shaped in particular by the ontological and epistemological assumptions underpinning the questions. At this point, it is useful to establish an understanding of the concepts of ontological and epistemological assumptions. This relates to the development of the knowledge and the nature of it (Saunders 2012). ‘Ontological assumptions are concerned with the nature of social reality; these assumptions make claims on what kinds of social phenomena do or can exist, the conditions of their existence, and the ways in which they are related. Epistemological assumptions are concerned with what kinds of knowledge are possible – how can we know these things – and with criteria for deciding when knowledge is both adequate and legitimate’. (Blaikie 2009, p. 92).

The following table presents different options for ontological and epistemological

assumptions in order to provide more detail for the rationale of the selection of assumptions.

Table 3-1.- Ontological and epistemological assumptions

Ontological Assumptions	
Shallow realist	<ul style="list-style-type: none"> - Existence of phenomena independent. - Only what is observed is relevant to science. - Challenge for science is to discover patterns or sequences and describe them.
Conceptual realist	<ul style="list-style-type: none"> - Reality is independent of human minds. - It is not the property of any individual or the construction of a social community. - It is a collective consciousness, or structure of ideas, and is not directly observable.
Cautious realist	<ul style="list-style-type: none"> - Reality has an independent existence. - It cannot be accurately observed directly . - A cautious and critical attitude must be adopted.
Depth realist	<ul style="list-style-type: none"> - Reality has 3 domains: Empirical (what can be observed); Actual (what exists independently of the observer; and Real (structures and mechanisms that may not be readily observed). - Reality is stratified and has ontological depth.
Idealist	<ul style="list-style-type: none"> - Reality is a representation created by the human mind. - Social reality is made up of shared interpretations that social actors produce and reproduce as they go about their everyday lives. - Reality has various forms: it exists independently of socially constructed realities; external reality placing constraints or providing opportunities; and construction of reality different (multiple) perspectives on an external world.
Subtle realist	<ul style="list-style-type: none"> - Reality exists independently of social scientists - Cultural assumptions prevent direct access to this world.
Epistemological Assumptions	
Empiricism	<ul style="list-style-type: none"> - Knowledge is produced and verified by the use of the human senses. - A neutral trained observer, who has undistorted contact with reality, can arrive at reliable knowledge. - Certainty of knowledge depends on its accuracy of the external world representation.
Rationalism	<ul style="list-style-type: none"> - Knowledge comes from the direct examination of the structure of human thought. - Evidence for an unobservable collective consciousness can be found in the consequences it has on people's lives, or in thought processes and structures of the mind itself. - Logic and mathematics provide the standards for judging knowledge

	claims.
Falsificationism	<ul style="list-style-type: none"> - Knowledge produced by a process of trial and error, theories are proposed and tested against empirical evidence. - Because of inability to observe reality directly, tests of theories must be directed towards trying to falsify rather than confirm them. - Not possible to establish whether knowledge is true, it must be regarded as tentative, therefore open to revision.
Neo-realism	<ul style="list-style-type: none"> - Knowledge of the causes of observed regularities is derived from the structures and/or mechanisms that produce them. - The discovery of these structures and/or mechanisms may necessitate the postulation or selection of entities and processes that go beyond surface appearances. - This view of causation allows for the possibility that competing or cancelling mechanisms may be operating when no event or change is observed.
Constructionism	<ul style="list-style-type: none"> - Everyday knowledge is the outcome of people having to make sense of their encounters with the physical world and other people; socially constructed knowledge is the outcome of social scientists reinterpreting this everyday knowledge into technical language. - Because it is impossible for fallible human beings to observe an external world unencumbered by concepts, theories, background knowledge and past experiences, it is impossible to make true discoveries about the world; all social enquiry reflects the standpoint of the researcher and all observation is theory-laden. - There are no permanent, unvarying criteria for establishing whether knowledge can be regarded as true.
Conventionalism	<ul style="list-style-type: none"> - Scientists create scientific theories as convenient tools for dealing with the world. - Theories do not describe reality; they determine, what is considered by the scientist to be real. - Decisions about what are good theories, or which is the better of two competing theories, is a matter of judgement, not proof.

Source: Adapted from Blaikie 2009

The above assumptions are not independent, meaning that for each ontological assumption there is a connected epistemological assumption. The only case that does not work in combination is the subtle realist ontology and the epistemology of conventionalism (Blaikie 2009).

Table 3-2.- Normal combinations of ontological and epistemological assumptions

Ontology	↔	Epistemology
Shallow realist	↔	Empiricism
Conceptual realist	↔	Rationalism
Cautious realist	↔	Falsificationism
Depth realist	↔	Neo-realism
Idealist	↔	Constructionism

Source: Blaikie 2009

Considering the aim of the research towards understanding performance of strategic alliances and taking account of the characteristics of each of the assumptions, it seemed that an idealist ontological assumption and a constructionism epistemological assumption fitted with the aim. An idealist assumption because reality is constructed from the human mind, interpretations and multiple perspectives of people with experience in strategic alliances in the energy sector and a constructionism assumption because knowledge would be the outcome of people with experience in strategic alliances and the consideration that knowledge cannot be regarded as true. As Blaikie (2009) pointed out, idealist and constructionist assumptions are a complementary combination.

Following choosing the ontological and epistemological assumptions, the selection of the research strategy came next. There are four main research strategies. These can answer different types of research questions and purposes and are normally associated with a research paradigm - however, they can be used with more than one paradigm (Blaikie 2009). Blaikie developed the following table of ‘the logic of four research strategies’:

Table 3-3.- The logic of four research strategies

	Inductive	Deductive	Retroductive	Abductive
Aim	Establish descriptions of characteristics and patterns	Test theories, eliminate false ones and corroborate the survivor	Discover underlying mechanisms to explain observed regularities	Describe and understand social life in terms of social actors’ meanings and motives
Ontology	Cautious, depth or subtle realist	Cautious or subtle realist	Depth or subtle realist	Idealist or subtle realist

Epistemology	Conventionalism	Falsificationism Conventionalism	Neo-realism	Constructionism
Questions	What	Why	Why	What & Why
Purpose	Exploration & Description	Explanation	Explanation	Understanding
Start	Collect data on characteristics and/or patterns Produce descriptions	Identify a regularity that needs to be explained Construct a theory and deduce hypotheses	Document and model regularity Describe the context and possible mechanisms	Discover everyday lay concepts, meanings and motives Produce a technical account from lay accounts
Finish	Relate these to the research questions	Test hypotheses by matching them with data explanation	Establish which mechanism(s) provide(s) the best explanation in that context	Develop a theory and elaborate it iteratively

Source: Blaikie 2009

The above table shows why the ontology and epistemology assumptions have been chosen. Idealist and constructionism respectively, fit with the purpose of this research with the abductive strategy, which aims to understand social life, in this case, strategic alliances, in terms of social actors' (people with experience in strategic alliances), meanings and motives. This table complemented the type of questions related to this strategy and the social purpose of the research. The abductive strategy comprises the 'what' and 'why' questions and the social purpose seeks to understand. This theory proved useful in confirming the research design and helping to verify the consistency of these decisions.

By using the abductive strategy, instead of moving from theory to data (as in deduction) or data to theory (as in induction), it moves back and forth. This, in effect, combines deduction and induction, as stated in the work of Suddaby (2006, cited in Saunders 2012 p. 149) 'This matches what many business and management researchers actually do.

Abduction begins with the observation of a ‘surprising fact’; it then works out a plausible theory of how this could have occurred.’

Furthermore, in applying an abductive approach to this research, the reasons for failure or success of strategic alliances would mean obtaining data that was sufficiently detailed and rich. This would allow to understanding by exploring, identifying and explaining themes and patterns regarding the performance of strategic alliances. I would then integrate these explanations in an overall conceptual framework, thereby building up a theory for the development of strategic alliances in the energy sector. This would be tested using evidence provided by existing data and new data and revised as necessary. (Blaikie 2009)

Since values or axiology is not considered in Blaikie’s research design framework, I thought it important to supplement his framework by drawing on the work of Saunders (2012). This had synergy as my values have influenced the choice of topic, research questions, data collection method and what I choose to report or not report. According to Saunders (2012) ‘Axiology is a branch of philosophy that studies judgements about value. Although this may include values we possess in the fields of aesthetics and ethics, it is the process of social enquiry with which we are concerned here. The role that your own values play in all stages of the research process is of great importance if you wish your research results to be credible’ (p.137). Heron (1996 cited in Saunders 2012, p.139) argued that ‘our values are the guiding reason of all human action... that researchers demonstrate axiological skill by being able to articulate their values as a basis for making judgements about what research they are conducting and how they go about doing it’ (p.139). Thus, the researcher demonstrates his values through all the stages of the research process. For instance, when selecting interviews in preference to questionnaires, it suggests that the researcher values personal interaction. This is an important element as I considered that, for this research, it was preferable to have interaction with people experienced in strategic alliances; interviews therefore became more appealing.

Research Paradigm

According to Blaikie, ‘research Paradigms can be chosen as sources of ideas and assumptions for use where appropriate’ (p. 97). The selection of a research strategy does not commit to choose a research paradigm, but the converse does. In the words of Saunders

(2012, p. 141) ‘A paradigm is a way of examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted’.

Different authors have different views on the classification of paradigms. Blaikie (2009) classified these in two main categories: classical paradigms and contemporary paradigms, while Saunders (2012) labelled them as research philosophies.

Saunders suggested that in order to select a philosophy/paradigm, three elements should be explored: the nature of reality, if it is external or socially constructed, objective or subjective; qualification of acceptable knowledge (observable phenomena or subjective meanings; law-like generalisations or details of specifics); and the role of values (value-free or value-bound).

Saunders compared the research philosophies in business and management research in terms of ontological and epistemological assumptions, axiology and data collection techniques. This comparison was useful in order to explain the selection of the interpretivism philosophy/paradigm for this research, as illustrated in the following table.

Table 3-4.- Comparison of four research philosophies in business and management research

	Pragmatism	Positivism	Realism	Interpretivism
Ontology (researcher's views of the nature of reality or being)	External, multiple, view chosen to best enable answering of research question	External, objective and independent of social actors	Objective. Independent of human thoughts, beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realist)	Socially constructed, subjective, may change, multiple
Epistemology: researcher's	Observable phenomena	Only observable phenomena can	Observable phenomena	Subjective meanings and

view on what constitutes acceptable knowledge.	and/or subjective meanings can provide knowledge dependent upon the research question. Focus on the practical applied research, integrating different perspectives to help interpret the data.	provide data, facts. Focus on causality and law-like generalisations, reducing phenomena to simplest elements.	provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively phenomena create sensations which are open to misinterpretation (critical realism). Focus on explaining within a context or contexts.	social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions.
Axiology: the researcher's view of the role of values in research.	Values play a large role in interpreting results, the researcher adopting both objective and subjective point of view.	Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance.	Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research.	Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective.
Data collection techniques most	Mixed or multiple designs,	Highly structured large samples,	Methods chosen must fit the subject matter,	Small samples, in depth investigations

often used.	quantitative and qualitative.	measurement, quantitative, but can use qualitative.	quantitative or qualitative.	qualitative.
-------------	-------------------------------	---	------------------------------	--------------

Source: Saunders 2012

It has been determined that the nature of reality is socially constructed and subjective. With acceptable knowledge considered as subjective and with me being part of the research, this means that it can be considered as value bound. This shows that the selection of an interpretivist philosophy is a 'best fit'; moreover the table provides some initial information for the selection of data collection techniques pointing to in-depth qualitative studies with small samples.

Thus, the underpinning research philosophy here is interpretivist. Strategic alliances deal with organisational theory and management far too complex to be explained by laws similar to those in physical sciences (Saunders 2012, Sekaran and Bougie 2013). From the intellectual traditions of interpretivism, I selected phenomenology because this research explored how people with experience in strategic alliances in the energy sector made sense of the field. This is also considered appropriate to management research (Saunders 2012).

The purpose of this section was to determine the research paradigm. Different authors have different viewpoints on the classification or analysis in the research paradigm. Blaikie's classification points to the traditional interpretivism paradigm while Saunders' research philosophy contributes to strengthen the stance by confirming the ontology, epistemology and axiology analysed in the previous section. Saunders' information of research philosophies also provided some initial thoughts for data collection.

Concepts, Theories, Hypothesis and Models

The purpose of this section is to provide explanations on decisions made as regards concepts, theories, hypothesis and models in this research. The main consideration was that 'the nature of research questions, and the choice of research strategy or strategies, will

determine how concepts are used, whether hypotheses are used, and the role of theory and models'. (Blaikie, 2009 p. 110)

Concepts

Concepts were used in this research as a way to represent ideas in words or diagrams and to provide an input for using theories to explain the relationships between concepts. (Blaikie 2009)

The following table summarises the connections between conceptual traditions and research strategies and is useful to support the decisions on the selections made.

Table 3-5.- Conceptual traditions and research strategies

Tradition	Meaning	Research strategy	Notes
Ontological	<ul style="list-style-type: none"> Concepts identify the basic features of some social phenomenon and the relationships between them. 	Deductive	<ul style="list-style-type: none"> Provides a background to all research. Find conceptual schemes very useful as source of variables.
Operational	<ul style="list-style-type: none"> Concepts are translated into variables by devising ways to measure them. 	Inductive	<ul style="list-style-type: none"> Concepts need to be selected, defined and operationalised
		Deductive	<ul style="list-style-type: none"> Hypotheses are deduced from theory and concepts in an hypothesis are measured in order to test whether or not a hypothesized relationship exists. While it is possible to test hypotheses using other methods, this research strategy has been dominated by the operationalising tradition.
Sensitizing	Concepts provide initial ideas of what to look for and these ideas will be refined as the research proceeds.	Inductive & Deductive	<ul style="list-style-type: none"> In an exploratory phase when relevant concepts and their definitions are being sought.
		Abductive	<ul style="list-style-type: none"> Can be used in different branches, but not most appropriate.
Hermeneutic	Concepts that a researcher uses to describe and understand	Abductive	<ul style="list-style-type: none"> Resist the imposition of top down schemes and prefer to generate their own concepts

	any social phenomenon are derived from everyday concepts and meanings.		<p>in a hermeneutic, bottom up manner.</p> <ul style="list-style-type: none"> Hermeneutic is most appropriate, because the generation of technical concepts from lay concepts is a hermeneutic process.
		Retroductive	<ul style="list-style-type: none"> Concepts are not operationalised in this research strategy; rather, structures and mechanisms are hypothesized and discovered by direct and indirect observations and experiments. Of course, to hypothesize the existence of a structure or mechanism requires the use of language, you have to have some idea of what you are looking for. This may involve adopting or adapting an existing concept, or inventing a new one, to identify it.
Adaptive alternative	<ul style="list-style-type: none"> Concepts that bridge aspects of individual social agency and reproduce social relations and practices. In other words, these concepts integrate agency and structure as well as the micro and macro levels of social analysis. 	Abductive	<ul style="list-style-type: none"> Linking the hermeneutic and the abductive with structural and general concepts can lead to a more productive theory generation.
		Deductive	<ul style="list-style-type: none"> The incorporation of both behavioural and structural concepts, and the bridging of social actors' and sociological concepts in the context of general theory, can only lead to more productive theories to test using the Deductive strategy.

Source: Adapted from Blaikie 2009

The abductive research strategy chosen influenced the selection of the sensitizing, hermeneutic and adaptive alternative conceptual traditions from the five traditions available in the literature. The sensitizing tradition provided ideas of what to look for at the outset

and process ideas were refined during the research. The hermeneutic tradition allowed me to be reflexive and reflective, considering concepts with an evolving meaning. I learnt from the participants and gained an understanding as to how they saw the world in terms of strategic alliances. The hermeneutic tradition also allowed me to define concepts as a starting point, but to incorporate changes through the research development. For example, following the literature review on the meaning of strategic alliances in chapter two, I considered various definitions and perspectives. I finally arrived at a definition for the purpose of an initial understanding. In the process of obtaining the perspective of the participants, this meaning was revisited. However, an adaptive alternative strengthened this, and provided more input for theory development. ‘Layder’s concern in ‘the development of an adaptive alternative is how establishing concepts that bridge aspects of individual social agency and reproduce social relations and practices. In other words, he wanted concepts that integrate agency and structure as well as the micro and macro levels of social analysis.’ (Blaikie 2009, p. 120-1)

Consistency with process theory was achieved by employing the adaptive alternative. This thesis seeks to understand the relationship amongst the organisations participating in a strategic alliance and their influence on performance. In line with most process scholars, I began with some ideas about the process of strategic alliances which came from my work experience and the literature reviewed. During the process, I attempted to find the balance between deduction and induction, thus following an abductive approach (Pettigrew 1997). More details are provided in the following sub-section on ‘Theories’.

The core areas of theory and knowledge which emerged from the literature review and the subsequent framing of the research questions were: (1) the meaning of strategic alliance, (2) types of strategic alliance, (3) motivators, (4) how decisions to enter a strategic alliance are made, (5) the selection of partners, (6) portfolio management, (7) performance measurement, (8) problems, risks, critical factors and perception of success and failure, (9) the influence of external factors, the role and influence of executives and managers on performance, (10) future prospects of strategic alliances and the challenges they might face. This sequence is derived from relevant topics identified in the literature review in conjunction with elements which need to be included in the development of strategic alliances due to their impact on performance. I explored all of these concepts with

participants during the interviews in order to gain insight on the practice of strategic alliances.

Theories

As explained in the introduction and literature review chapters, this research took a cultural and process theory approach of the performance of strategic alliances. Through the lens of those with experience in the energy sector, process theory examined how strategic alliances were developed. Acknowledging that social reality is a dynamic process, the insights of key informants were fundamental in capturing their views of the development of strategic alliances in the energy sector (Pettigrew 1997). By using process theory, temporal progressions of activities would be incorporated as elements of explanation and understanding of strategic alliances (Langley et al. 2013).

I chose to employ a cultural and process approach to observe the process in action from the perspective of people with experience, therefore describing how strategic alliances change over time (Pettigrew 1997). Strategic alliances in the form of stories can help to understand their performance by constructing cultural visions among different key informants who provide insights of the development of strategic alliances in the energy sector (Reichie et al 2010, Giorgi et al 2015)

The process approach was iterative. This allowed me to increase learning about pattern acquisition and pattern recognition, firstly by identifying where to look and secondly identifying similarities and differences within the data analysed (Klag 2013). This process was fundamental in presenting the findings and in building the holistic model for the development of strategic alliances which is presented in the discussion chapter.

Hypotheses

This research did not have hypotheses as they ‘play a limited role in social research, only being relevant to the answering of ‘why’ research questions with the Deductive research strategy’ (Blaikie 2009, p. 111). This decision provided flexibility in conducting the research and I considered it more useful to focus on answering the research questions and to being open to the perspectives and experiences provided by the interviewees. ‘How’ questions do not require hypotheses. The ‘why’ component of the research questions were

not considered necessary to have hypotheses as this research did not involve either the measurement of concepts or the statistical testing of relationships (Blaikie 2009).

Models

Models were used in this research as I considered them an effective means to organise, analyse and synthesise information and a valuable way to communicate the findings (Blaikie 2009).

Blaikie established seven types of model: Abstract descriptions, synonym for theory, conceptual models, theoretical models, analogue mechanisms, diagrammatic representations and mathematical representations. These are illustrated in the following table which establishes the relationship among research strategies, the nature of theory and the use of models.

Table 3-6.- Research strategies, theory and models

Research strategy		Nature of theory	Use of models
Inductive	Form:	Generalizations Networks of propositions	Abstract descriptions Mathematical representations
	Process:	Generated by induction from data	Conceptual frameworks
Deductive	Form:	Deductive argument produces hypotheses	Theoretical models
	Process:	Hypotheses tested by matching against data	Diagrammatic representation Mathematical representation
Retroductive	Form:	Generative structures and/or mechanisms	Abstract descriptions
	Process:	Modelling of hypothetical mechanisms	May involve use of analogies
Abductive	Form:	Social scientific accounts	Abstract descriptions
	Process:	Generated from everyday accounts	Ideal types

Source: Blaikie 2009

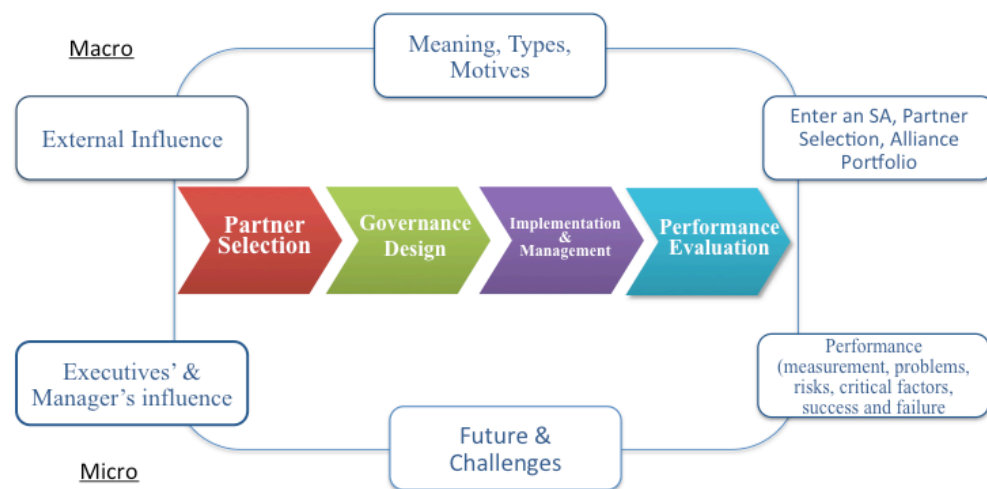
Abstract description models were selected because they better assisted the purpose of this research. As they are used in an abductive strategy, these models are an attempt to establish a ‘bridge between the meanings of social actors used in everyday activities and the meaning the social scientist must attribute to these activities to produce an adequate theory’ (Blaikie

2009, p. 149).

Taking both the conventional model of strategic alliances (Jiang 2008, Kale and Singh 2009) and the concepts of interest that emerged from the literature review into consideration, I inserted the concepts around the conventional model to demonstrate the need to take a more holistic process approach to integrate other areas of concern that influence the performance of strategic alliances.

Strategic alliances are influenced by the different cultural contexts in which they are deployed, from the corporate to the international context and different cultural levels from the individual, and organizational to the societal level, from the micro to the macro level (Reichie et al 2010; Giorgi et al 2015). This is illustrated in the following figure:

Figure 3-3.- Concepts of interest and conventional model of SAs



Source: Adapted from Jiang (2008) and Kale and Singh (2009)

This figure illustrates the process and areas of concern of strategic alliances, where performance is the focus of attention and the areas of concern are: meaning, types and motives, decision making process to enter a strategic alliance, partner selection and alliance portfolio; the way performance is measured, the problems, risks and critical factors; the influence of external and internal factors; and, finally, the prospect in terms of the future and challenges for strategic alliances. These provide the foundation for the development of

the holistic multi-perspective model which is presented in the discussion chapter.

Data Types, Forms and Sources

This section explains the kind of data that will be collected for this research, where it comes from and how it was selected.

This research mainly focussed on face-to-face interviews employing a conversational, flexible style designed to elicit experience-based narrative. The form of data was transcribed text, taking into consideration that non-numerical data is now more acceptable than in the past. This is due to the shift in the perception that text can be considered both precise and reliable (Blaikie 2009).

A conversational setting was chosen for this research. Individuals with experience in the development of strategic alliances talked about their perspective and understanding of the energy sector through semi-structured interviews providing ‘added descriptive realism’ (Robson 2006, p.603). Data was gathered, taking into consideration how social actors in strategic alliances in the energy sector view and perceive the development of them, ‘social participants’ knowledge, perceptions and experience’. This had an influence on the research strategy and its position (Blaikie 2009, p. 171), as was explained in previous sections.

Selection from Data Sources

In terms of data selection, the population of interest for this research is people with experience in strategic alliances in the energy sector, where their knowledge, insights and perspectives were considered fundamental to this research (Flick 2014). The sample is non-probability, in a single stage. Despite the complexity of sampling, this was chosen in order to deal with the limitations of time and resources (Blaikie 2009).

The use of sampling in the area of strategic alliances is complicated as information on details and perceptions of people working in strategic alliances is not available in public sources. Therefore the use of a non-probability sample is justified - ‘it is better to have some knowledge than to have no knowledge of the topic at all.’ (Blaikie 2009, p. 176).

Taking the intensive use of resources in a qualitative study into consideration, a small sample will be used as a way of obtaining more in-depth, detailed data in an

unrepresentative sample (Blaikie 2009).

The sampling methods used in this research were judgemental sampling and snowball sampling. The former due to the interest in obtaining the knowledge, experience, and perspective of persons involved in the development of strategic alliances which could result in in-depth investigation. Snowballing was used in order to locate participants through recommendation or referral (Blaikie 2009). In order to identify potential participants, I spoke with people I knew from the industry and attended several conferences and seminars as a way to meet people and find further potential participants. I approached those with experience in the energy industry and in strategic alliances to have conversations about the industry, strategic alliances and my research project. I followed up these conversations and kept contact with them, providing further details of the research project to the potential participants in the form of a Participant Information Sheet (Appendix 3-2), Informed consent form (Appendix 3-3), and the Interview briefing (Appendix 3-4).

Some participants were referred by the people I interviewed, thus creating the snowball effect as previously mentioned.

Data was collected through in-depth semi-structured interviews with 15 participants from the period of January to December 2014. Each of these people has more than 20 years of industry experience. They have different backgrounds: Engineering, Economics, Law, Political Science, Environment, Geology, Geography, Physics, and Accountancy. Most of them have completed postgraduate studies in areas such as Management, Political Science, Environment, and Law. This element enriched the information through gaining a multidisciplinary perspective. The following table shows their demographic information, presented here in limited fashion so as to maintain confidentiality.

Table: 3-7 Demographics of participants

Participant	Education	Work experience
1	Chemical engineer, Masters	Oil & Energy Consultancy, Integrated oil Companies
2	Accountant	Financial & Strategy Consultancy, Power companies, Independent Companies
3	Political Science, PhD	Oil & Energy Consultancy, Integrated oil Companies, Government
4	Chemist, PhD	Technology Consultancy, Technology and Engineering Energy Companies, Petrochemical Companies
5	Engineer, MBA & MSc	Consultancy, Integrated Oil Companies
6	Physics, MBA	Consultancy, Integrated Oil Companies
7	Lawyer, PhD	Law Firms Oil and Gas, Consultancy
8	History & Geology, MBA	Consultancy, Chemical Companies, Government
9	Chemical Engineering, MBA	Energy and Petrochemical companies
10	Economist, Advanced Management Program	Consultancy, Oil and Energy Companies
11	BsC Geography, Masters in Environmental Law	Energy and Technology Companies
12	BsC Environmental Sciences, MBA	Petrochemical companies, Government
13	Lawyer	Law firms Oil and Gas
14	Economist, MSc Operational Research	Consultancy, Integrated Oil Companies, Energy Companies
15	Chemical Engineer, MBA Strategy & Management	Service Oil & Gas Companies, Consultancy, Independent Oil & Gas Companies

As can be seen from the above table, participants have worked or are working in, amongst others, Integrated Oil Companies, Service Companies, Independent Companies, Energy Companies, Consultancies and Law Firms. In their careers, most of them have worked for different companies.

An interview briefing was developed which had four purposes: to inform potential participants on the scope of the interview by providing general themes; to be used as a guide during the interview; to build an incremental engagement in the topic from the start to the end of the interview, and to build structure into the data collection process (Pettigrew

1997). The content of the interview briefing was derived from the process followed in the construction of the research questions as outlined earlier in this chapter. Initial thoughts on the elements of the holistic process model for strategic alliances began to emerge while building the interview briefing through a process of reflection on the research questions and the themes to be explored that emerged from the literature.

Interviews began by examining the participants' understanding of the meaning and types of strategic alliances. They moved on to explore the motives to pursue the development of strategic alliances, the external limitations or constraints that were faced, the process, looking at decisions to enter a strategic alliance, partner selection and performance measurement. The interviews focussed on the problems of strategic alliances by asking questions from different perspectives. These questions included difficulties encountered, risks and critical factors. This questioning strategy took time to become fruitful within the interview setting and eventually elicited new or deeper insights into the problems. For example in the understanding of success and failure factors, and the influence of people involved; and the perception of the future and challenges for strategic alliances.

Through analysis and reflection, interview themes were adapted both incrementally and on an ad hoc basis in response to the live interview.

Along the interview process I was able to establish thematic saturation alongside significant variance between the data and the established theoretical underpinnings of the field. It also allowed me to shift the interview emphasis toward challenging the established theoretical assumptions further to provide a foundation for proposing adaptations to theory and creating a substantive opportunity to contribute to the field. This sampling approach is theoretical (Silverman 2011), it clearly utilised theoretical propositions to establish how many participants were required and how the criteria for selection should be applied. It also builds on the work by Strauss and Corbin (1990) in creating a structured, stepped approach to building a qualitative sample. The sample size was deemed to be credible as data saturation was established. This provides the foundation for generalising the data to the theoretical propositions explored later in the thesis.

Data Collection and Timing

Qualitative methods were selected as they demanded more involvement as a researcher and brought me closer to the participants. This allowed me an enhanced understanding of the issues and challenges of strategic alliances. A qualitative method instead of a quantitative one therefore made more sense (Blaikie 2009). In-depth interviews were used. These were developed in the form of semi-structured interviews and gave me the opportunity to get closer to the meanings and interpretations of the participants and to their accounts of perspectives and experiences in this field (Blaikie 2009). Semi-structured interviews were developed as being more suitable to capture views and perceptions than a standardised interview (Flick 2014).

There should be an acknowledgement that both methods, quantitative and qualitative, have their own applications and limitations (Blaikie 2009). I was aware of the critics of generalisation from qualitative methods - quantitative methods also demand similar procedures in order to generalise and there are problems found in both perspectives. In qualitative studies, generalisation is restricted to research sites or populations. Statements can be applied to other locations where this is indicated in the data. Moreover, a quantitative perspective fails to consider the details of a situation and does not reflect on the subjective contribution of individuals (Saunders 2012). I therefore considered that a quantitative approach was not suitable- the perspective of people with experience in strategic alliances was key to this research.

The research was a retrospective study to understand and collect the particular experience and perspectives of those involved in strategic alliances in the energy sector. This decision acknowledged Blaikie's thoughts on the limitation of this type of research, in terms of the memory being 'fallible and its use always involves a possible reconstruction of the past under the influence of subsequent experiences' (Blaikie 2009, p. 203).

Qualitative methods were chosen for this research due to their concern with 'exploring social actors' meanings and interpretations' (Blaikie 2009, p. 204). This departed from the idea that quantitative methods are 'generally concerned with counting and measuring aspects social life'; the approach was from the perspective of strategic alliances in the energy sector. As a researcher, by conducting semi-structured interviews, I was removed

from the natural setting, but was, at the same time, brought closer ‘to the social actors’ meanings and interpretations’.

The decision to choose a qualitative perspective was supported by looking at the concerns of researchers using a quantitative or qualitative approach. Blaikie cited the work of Bryman on this matter, which is presented in the following table:

Table 3-8.- Quantitative and Qualitative researchers’ concerns

Quantitative	Qualitative
<ul style="list-style-type: none"> • Measuring concepts • Establishing causality • Generalizing • Replicating • Focusing in individuals 	<ul style="list-style-type: none"> • Using social actors’ point of view • Describing thickly • Focusing on social processes • Adopting a flexible approach • Developing concepts and theory

Source: Blaikie 2009

The concerns of researchers confirmed that qualitative features are a better fit with the purpose and interest of this research because they used the viewpoint of people with experience in this area and attempted to develop concepts and theory (Blaikie 2009). The emphasis of qualitative data informs the meanings individuals place on the events, processes and structures of strategic alliances. It also connects these perceptions to improve the understanding of performance of strategic alliances in the energy sector (Miles and Hubberman 1994). By choosing qualitative research, I acknowledge that I sacrificed scope for detail (Silverman 2013), however, I considered that the aim of this research would benefit more by having in-depth information on the experience and perspectives of strategic alliances provided by interviewees. There was also the opportunity to increase the number of qualitative studies in the field of strategic alliances, which Gomes et al. (2014) suggested was necessary.

Data Reduction and Analysis

The data reduction stage was a continuous process of selecting, simplifying, abstracting, and transforming along all the phases of this research (Miles and Hubberman 1994). This stage of the research was highly engaging as it was a continuous and iterative process of reflection.

Having researched Computer Aided Qualitative Data Analysis Softwares, I became interested in using software as a way to introduce technology as a tool for analysis. NVivo was selected due to its range of features and availability within the University.

Undertaking a learning and doing strategy, I first read extensively about Nvivo, attended a course and watched videos in order to gain knowledge about the software. I also contacted the company which develops the software to obtain clarification where necessary. Interviews were transcribed, and the NVivo CADQAS was used to assist the analysis.

I engaged in analytic coding following advice from Denscombe and Dawson (2007). I determined that the units for coding could be variable and the length should be sufficient to illustrate the sense expressed by the participant. What was coded was based on the kind of event, type of action, shade opinion, an instance of the use of a particular word or expression, or an implied meaning. During the process analysis of key informants, I constantly searched for mechanisms that could drive the process of strategic alliances (Pettigrew 1997).

The themes identified as a framework for each interview were as follows:

- Meaning and types of strategic alliances
- Motives and decision making process to enter
- Partner selection
- Management of portfolio
- Performance measurement
- Problems
- Risks
- Critical success and failure factors
- Influence of executives and managers
- Future and challenges that strategic alliances will face

The focal point of the interviews was to elicit participant perceptions through discussing and analysing examples from their experience to explore each theme.

These themes were used to organise the first thematic coding. The software was utilised and the interviews were analysed line-by-line, developing codes which resulted in Sub-level categories.

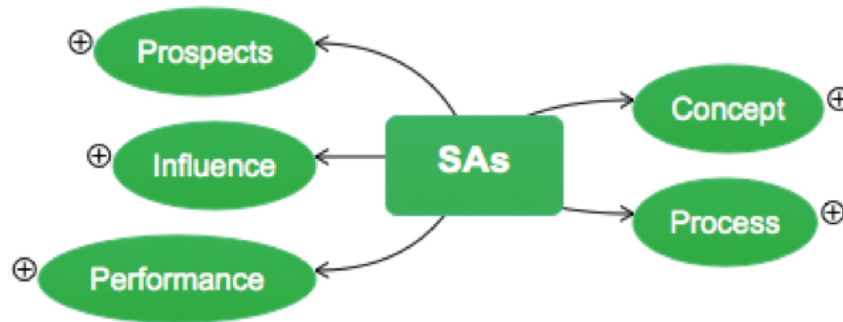
Initial themes that could follow the development process of strategic alliances and that were considered in the literature review were reorganised into five general themes: Concept, Process, Performance, Influence and Prospects. They were then subdivided as follows: Concept included: Meaning, Types, and Motives. Process: Decision to enter a strategic alliance, Partner Selection, and Portfolio. Performance: Measurement, Problems, Risks, Critical Factors, Failure and Success. Influence: External Constraints, and Prospects: Future, and Challenges.

In light of these themes, transcripts were organised to develop an auto code in NVivo. The purpose was to have a segmentation of the information, to get a cross-sectional level of the themes from the participants' perspective and to facilitate the analysis. During the process it was useful to abstract relevant insights which started to emerge from the findings and to display these in the form of boxes and diagrams. While coding the themes, some codes were found within other themes and others emerged from the analysis. After reviewing and reflecting on the second iteration of findings, the theme of Performance was reorganised in accordance with the categories that emerged from the insights of interviewees (see Chapter 5).

The iterative process injected confidence in the robustness of the method followed. The displays and findings chapters were also discussed with one of my interviewees and my supervisors and their critique was helpful in the development of this stage.

These themes and subthemes formed a sequential stage in the holistic process model as presented in the discussion chapter. They also shaped the sequence on structure in the findings and discussion chapters. The five general themes are illustrated in the following figure:

Figure 3-4.- Five general themes for data analysis



Ethics

This research involved collecting data from people and therefore needed the approval of the University of Dundee Research Ethics Committee (UREC). In order to obtain this, the University of Dundee Code of Practice for Research Human Participants was followed and all the documents required by UREC (such as the Participant Information Sheet (Appendix 3-2), Informed consent form (Appendix 3-3), and the Interview briefing (Appendix 3-4)) were produced. These were submitted and approval was subsequently granted by the committee (Appendix 3-5).

Information was provided to potential participants through the participant information sheet. This explained the purpose of the research, time commitment, the option to withdraw from the study, risks involved and how confidentiality and anonymity would be preserved. Participants who agreed to take part signed the informed consent form. In order to preserve confidentiality and anonymity, quotations in the thesis were edited.

Conclusions

Blaikie's research design framework, complemented by information from other authors, guided the choice of methodology and associated research methods. Developing the research design was a continuous process that allowed each of the parameters to be reviewed and adapted.

This thesis attempted to understand the performance of strategic alliances from the perspective of those with experience in their development. It therefore took an idealist ontological assumption and, consequently, a constructionism epistemological assumption where participants informed their knowledge of strategic alliances by making sense of their experience. This embraces the idea that each participant produces independent knowledge. (Blaikie 2009)

An abductive approach on the reasons for failure or success of strategic alliances was taken to obtain data that was sufficiently detailed and rich to allow an understanding of the reasons for failure or success. By exploring, identifying and explaining themes and patterns regarding the performance of strategic alliances. These explanations were integrated in an overall conceptual framework (Blaikie 2009).

The research philosophy selected was interpretivism because strategic alliances deal with organisational theory and management far too complex to be explained by laws similar to those in physical sciences (Saunders 2012, Sekaran and Bougie 2013).

This research mainly was developed by primary data, within a semi-natural setting, where individuals with experience in the development of strategic alliances talked about their experience and perspectives in the energy sector (Blaikie 2009).

The sample is non-probability in a single stage as sampling is complicated in the area of strategic alliances. Information on details and perceptions of people working in strategic alliances are not available in public sources. The sampling methods used were judgemental sampling and snowballing. The sample is small due to the intensive use of resources in a qualitative study and in order to have a more in-depth data on an unrepresentative sample (Blaikie 2009).

In-depth interviews were conducted. These were developed in the form of semi-structured

interviews and this gave the opportunity to get closer to the meanings and interpretations of the people involved in strategic alliances and their accounts, perspectives and experiences in this field (Blaikie 2009).

The literature review, my experience in the field, the process of developing the research questions, the development of a interview briefing and the data reduction process combined to identify the elements of the holistic process model as presented in the discussion chapter. This provided a structure by which to present the findings and discussion according to: Concept, Process, Performance, Influence and Prospects. As presented in the following chapters.

CHAPTER 4 ‘FINDINGS - CONCEPT & PROCESS’

Introduction

The aim of this research is to gain an in-depth understanding of the performance of strategic alliances in the energy sector. This is achieved by drawing on an in-depth qualitative study of the perspectives of those with experience in strategic alliances within this sector. The following three chapters will present the findings of the developed qualitative analysis as explained in Chapter 3 preceding, ‘Methodology-Methods’. Taking the substantial number of interviewees’ insights into account, the findings are reported in separate chapters and accompanied by a linking, separate discussion chapter where findings are related to existing literature (Burnard 2008).

The three ‘findings’ chapters are organised according to the general themes of concept, process, performance, influence, and prospects. These are the five elements of the holistic process model and are presented in the discussion chapter as follows:

Chapter 4: concept and process

Chapter 5: performance

Chapter 6: influence and prospects

The following research questions (RQ) were posed in Chapter 3:

RQ1: How and why have strategic alliances been developed in the energy sector?

RQ2: How and why do strategic alliances succeed or fail?

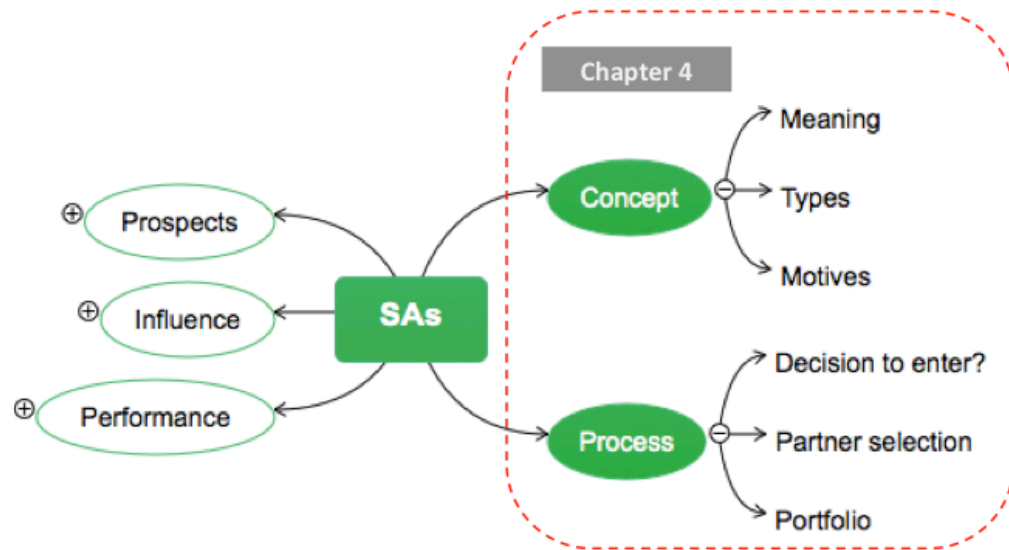
RQ3: Why do firms engage in strategic alliances despite low success rates?

RQ4: How can we create more effective strategic alliances in the energy sector?

These findings were used to inform the study’s research questions (Goodson 2013). I have sought to assist an understanding of the narrative by presenting the findings using tables and diagrams. The format of each section is as follows: Firstly, I have presented a narrative of interviewee’s quotations. Secondly, where a table is presented it contains 3 columns entitled ‘Key themes’, ‘Quotation’ and ‘RQ’ (Research Question). ‘Key themes’ consist of relevant ideas from the ‘Quotation’ and assist the narrative. The participants’ quotations are connected to the research question that they inform, as specified in the column ‘RQ’. In sections where tables are not employed, the relevant research question is identified in

brackets. Tables are cross-referenced with the relevant subsection of literature; this is specified in the title of the table as 'LR'. The quotations are verbatim except where minimal editing was required to preserve confidentiality. Diagrams are presented along the sections and subsections to facilitate the understanding of the development of the key findings.

Figure 4-1.- Structure of chapter 4



The diagram above highlights the sections and subsections that are presented in this chapter. These are: Concept - meaning, types, motives, and Process - Decision to enter a strategic alliance, partner selection, and portfolio.

Concept of Strategic Alliances

Meaning, types and motives are grouped under this theme, as they are foundational to the understanding and construction of the concept of strategic alliances. This theme is the first element of the holistic process model presented in the discussion chapter, the sub elements being strategic alliances, types, and motives.

Meaning of Strategic Alliances (RQ1-4)

The meaning of strategic alliances emerged as a core theme from the literature review. I found there was no a single definition for strategic alliances; different authors construe different meanings. This point was reinforced by my personal experience in the field, both in presenting this research and in having conversations with a variety of people within the

industry. In chapter 2 of the literature review, an initial meaning was developed. Interviewees were asked about their understanding of the meaning of strategic alliances. This section presents the findings as regards meaning and is organised under the subsections of: broad term and boundaries; organisations, alignment and competitive advantage; strategic component; ‘marriage’, temporal and duration; and concept and measurement.

Broad Term & Boundaries (RQ1)

Some interviewees pointed out that ‘strategic alliances’ is a broad and diverse term which can incorporate different meanings. They also highlighted that there are other types of strategic alliances apart from a joint venture, and that the boundaries of a strategic alliance fall somewhere between a contract and an acquisition. This can be illustrated in the following table of quotations:

Table 4-1.- Strategic Alliance: a broad term and boundaries (LR: Definition of strategic alliances)

Key themes	Quotation	RQ
Broad	<i>Quite a broad... term (Interviewee 1)</i>	1
Diverse	<i>Strategic alliances can...take quite... a lot of different forms. (Interviewee 6)</i>	1
Different meanings	<i>Whatever you want it to mean... It can mean a wide range of different things. (Interviewee 8)</i>	1
Other types of strategic alliances besides JVs	<i>I see the broad concept so it doesn't have to necessarily be a joint venture so. (Interviewee 9)</i>	1
In between a contract and an acquisition	<i>It's the grey area between a contract and an acquisition... (Interviewee 10)</i>	1

The quotations above illustrate the diversity of the meaning of strategic alliances within the energy sector. This diversity may lead to issues when developing a strategic alliance because different understandings could lead to different behaviours among the organisations involved. Therefore, it is important to achieve a common understanding of ‘strategic alliance’ when organisations discuss alliance development. The following figure illustrates these findings, where the meaning of the strategic alliance is broad, diverse and in between a contract and an acquisition.

Figure 4-2.- Broad term & boundaries



Parties, objectives, alignment, benefits & competitive advantage (RQ1,3)

The majority of interviewees pointed out the number of partners involved in a strategic alliance and alluded to various elements that contributed to its meaning. Some interviewees believed that a strategic alliance is a collaborative agreement amongst two or more companies aligned to a common strategic objective to pursue a business opportunity that cannot be addressed separately. It furthermore looks for mutual benefit and the development of a competitive advantage. It can be an agreement of cooperation up to a full joint venture, either created as a stand-alone business or putting together joining two businesses, and when the strategic objective is reached the strategic alliance comes to an end. A strategic alliance is different from a merger. Two interviewees pointed out a different perspective on the number of projects that were involved in a strategic alliance. The following table of quotations illustrate these points well:

Table 4-2.- Parties, objectives, alignment, benefits & competitive advantage (LR: Definition of strategic alliances)

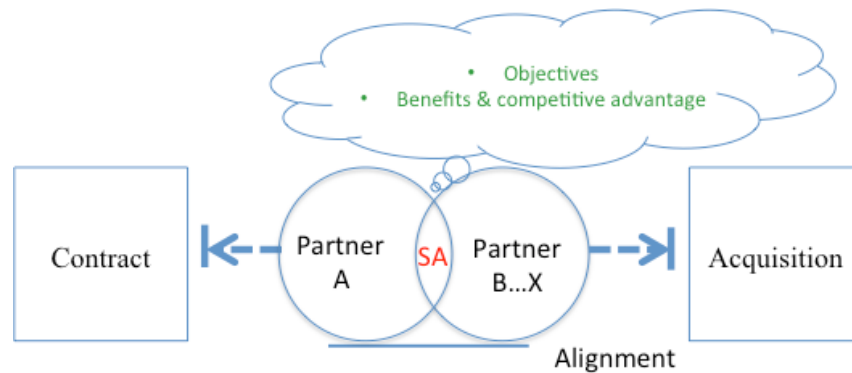
Key themes	Quotation	RQ
Two or more companies agreed on a common strategic objective	<i>If two companies, or more, companies have the similar objective and they pursue that on a broader front of activities . Through a number of ventures together to meet an agreed and commonly understood strategic objective. (Interviewee 9)</i>	1
A number of partners that get together to pursue a business opportunity that	<i>A coming together of a number of partners... two at least... in order to address, an area, a business opportunity that separately cannot be addressed ... (Interviewee 14)</i>	1,3

cannot be addressed separately.		
Loose or formalised collaboration to align and find mutual benefit	<i>In terms of alliance, it could be a loose or more formalised collaboration, put it that way. More about trying to get aligned with other organisations or other individuals. And trying to find useful, mutual benefit, or mutual goals... (Interviewee 11)</i>	1,3
Alignment among a number of parties	<i>It is, well, an alignment between two parties, or three parties, five parties, whatever it maybe... (Interviewee 3)</i>	1
Creation of competitive advantage	<i>The closer you are to the business side of it , people really see more the added value of being in a market faster, offering a more extensive package and creating a competitive advantage through a strategic alliance a competitive advantage. (Interviewee 4)</i>	1,3
An agreement to cooperate, up to a full JV, where two partners create a stand alone business or put two businesses together	<i>It can be a framework agreement to co-operate across a number of areas up to a fully incorporated joint venture where the two partners have created maybe a stand alone business or put two businesses together... (Interviewee 10)</i>	1
strategic alliances end once the objective of a specific project is achieved	<i>The strategic alliance is two or more people coming together to undertake a specific project and once that specific project has been completed then the strategic alliance effectively comes to an end. (Interviewee 7)</i>	1
Different from a merger, intended to last for more than one project	<i>I think of a relationship between, independent companies. So something different than a merger, but something which is intended to last for more than one project. (Interviewee 13)</i>	1,3

The above quotations demonstrate that there is no a limit on the number of partners involved which could lead to a variety of challenges in trying to achieve alignment. At the same time, it seems that the search for benefits acts as a driver to develop strategic alliances and achieve competitive advantage.

The following figure represents these findings. As can be seen, the number of partners could fluctuate, with regard to the need for alignment, the interest of organisations in achieving benefit and pursuing the development of a competitive advantage.

Figure 4-3.- Parties, objectives, alignment & competitive advantage



Strategic component (RQ1,3)

Some interviewees highlighted that the word ‘strategic’ was related to the contribution to the long-term vision of the parties involved. This means that it leaves a lasting footprint, that it fits into an overall plan and that strategic alliances could have a relative and different importance to each of the parties involved. One interviewee believed that ‘strategic’ meant the alliance would last for more than one project. The following table of quotations illustrate this:

Table 4-3.- Strategic component (LR: Definition of strategic alliances)

Key themes	Quotation	RQ
Bring something aligned with the long-term vision of the parties. A more lasting footprint.	<i>[The] strategic word in strategic alliances suggests... that the alliance is going to bring something to both parties, which is in the line with the achievement of both parties’ long-term vision... strategic means it’s going to leave a more lasting footprint because structurally both companies will benefit in some way, shape, or form... allow them to achieve their longer term vision over time... (Interviewee 1)</i>	1,3
Fits in an overall plan	<i>Strategic when it fits into the overall plan of a particular company or companies that to further their goals... (Interviewee 3)</i>	1
Relative importance	<i>Strategic just depends on how important it is to somebody... (Interviewee 7)</i>	1
Last for more than one project	<i>[It is] intended to last for more than one project. That’s why it’s ‘strategic’ as opposed to ‘tactical’... (Interviewee 13)</i>	1

Metaphor of marriage (RQ1)

Some interviewees used the metaphor of marriage in order to inform the definition - a marriage in terms of formality but not permanence. This implies an element of temporality and also the satisfaction of needs between the parties.

Table 4-4.- Marriage, temporal and duration (LR: Definition of strategic alliances)

Key themes	Quotation	RQ
Marriage, formal, but not necessarily permanent	It's a marriage between companies not necessarily a permanent thing... but that has some formality to it and they are both looking to satisfy some needs and has a complementary element to it that is a two-way street. (Interviewee 5)	1,3
Marrying resources	Where you're really marrying financial resources and technology resources with access to feed stock...' (Interviewee 12)	1,3

Even though there is a temporal element to the alliance, certain objectives are still achieved, as illustrated by the following quotation:

As a way to access a resource or a skill that you don't have - you only want that strategic alliance for so long as you need that resource or skill. You don't want it after that so... you've got to expect that at some point in time people will say 'enough I don't need this anymore'...and as I said that could be by simply buying out the other party...Or it could it simply be 'I've now adopted this skill myself so I don't need you anymore'. (Interviewee 7)

There were different opinions about the time strategic alliances last:

Table 4-5.- Duration of alliance (LR: Definition of strategic alliances)

Key themes	Quotation	RQ
Short or extremely long	<i>Now time can be very short to extremely long... (Interviewee 7)</i>	1
Last for a number of years	<i>Strategic alliance, I would view it as something that, was probably intended to last for a number of years... (Interviewee 13)</i>	1

Concept and measurement of performance (RQ2)

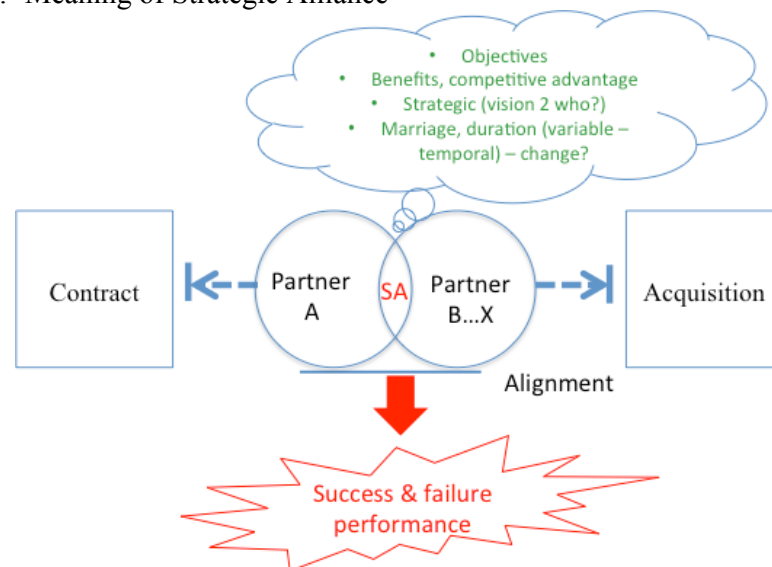
One interviewee highlighted the relationship between the concept of a strategic alliance and the measurement of success and failure with the size of the deal and the respective interests of each of the parties involved. The comment was related to an example given by the Interviewee where the relative importance of the strategic alliance was different for each of the parties. This brought different bargaining powers when problems arose because the strategic alliance affected more of the core business operations of one party than the other. This is of particular interest as it establishes a connection between the relative relevance of the strategic alliance and the perception of performance. The relationship is illustrated in the following quotation:

The concept of strategic alliance covers so much ground, you have to be careful how you measure the success and failures of such alliances depending on how much is involved. (Interviewee 3)

The quotation above establishes an important link between meaning and effect in performance and confirms the need to reach a common understanding when organisations are discussing development of a strategic alliance. It seems advisable to make this discussion part of the process of a strategic alliance development.

The following diagram integrates the findings of meaning.

Figure 4-4.- Meaning of Strategic Alliance



As illustrated in the diagram above, the meaning of strategic alliance is broad and the boundaries are somewhere in between a contract and an acquisition; parties involved need to be aligned. The strategic component is related to vision and is relative to each party. The duration is variable and temporal; the metaphor of marriage was used in illustration, and its meaning influences the perception of performance in terms of success or failure depending on how much a particular party is involved.

In the next section, the findings around the types of strategic alliances are presented.

Types of Strategic Alliances (RQ1)

Interviewees were asked about the types of strategic alliances they were familiar with. Types can take various forms - from a loose structure/agreement to a more formalised structure, and could also take the form of an incorporated joint venture.

Various types & different levels (RQ1)

The majority of interviewees commented on the various forms of strategic alliance that they have experienced. Among these were strategic alliances related to: technology, supply, research and development, operating, market and licensing specifically for the energy industry. There were examples given between National Oil Companies and International Oil Companies. Also there could be strategic alliances of geographical scope, global, regional or country levels and strategic alliances between competitors. The acknowledgement that these could go beyond an organisational level to an industry level is illustrated in the following quotation:

A number of industry players get together and in a fairly organised way seek to lobby government to achieve a particular aim. I suppose you could view that also as a kind of a strategic alliance. (Interviewee 13)

Some interviewees highlighted a number of considerations that influence the type of strategic alliance chosen. It was mentioned that strategic alliances were influenced by strategy and objectives as well as legal compliance and requirements. It was believed that types of structures are limited and the selection of the structure was chosen according to the degree of flexibility desired. It was perceived that the more formalised the arrangements, the more time needed to develop legal documents and to negotiate terms. It was suggested that strategic alliances could start as a pilot or a loose collaboration in order to get to know the partners and experience how they work together prior to fully committing resources. If the strategic alliance worked, it might result in a more formal relationship. These points are illustrated in the following table of quotations:

Table 4-6.- Considerations for types of strategic alliances (LR: Types of Strategic Alliances)

Key themes	Quotation	RQ
Type shaped by objectives and definition of the alliance	<i>It depends on what your strategy or your strategic objectives are... (Interviewee 8)</i>	1
Legal compliance and requirements	<i>I guess the structure is driven partly by... legal and compliance requirements, partly by the requirements of the third parties that you're going to deal with... (Interviewee 13)</i>	1
Structure & Flexibility	<i>And so the types of structures you can use are roughly limited...and the structure you'd normally choose is the one that gives you a degree of flexibility...you're looking for. The other fact that can have some various taxes but generally it's the structure that gives you the flexibility you require... (Interviewee 7)</i>	1
Structure and time invested	<i>If you go for formalised arrangements, that need to be documented legally, that causes delay, because you have to write those contracts and the Lawyers have to review them, and... that can be very slow... (Interviewee 13)</i>	1
More detail more negotiation more time	<i>Sometimes if you try to structure it too much and have a lot of definition and draw up a proper joint venture in terms of a... proper company, you might take a lot of time because there's a lot of negotiation to do. (Interviewee 15)</i>	1
Pilots	<i>You can actually have pilots and see what happens... (Interviewee 14)</i>	1
Then structure follows	<i>Sometimes it is easier...we agree there is a need... we agree we could both benefit. You have something that I don't have. Let's just get on and do it... and then you basically start collaborating, start working together, start getting on with each other... and once you see that things are indeed working, that you both are making money and that it's...it's a relationship that you want to put together, then it becomes easier to structure it further. (Interviewee 15)</i>	1

The quotations above highlight a number of aspects which seem to be important in the process of selecting a structure for a strategic alliance. One aspect is to consider the objectives of the strategic alliance, in relation to the meaning of a strategic alliance as discussed in the previous section. Legal compliance and tax aspects influence the structure selected and the degree of flexibility required is another consideration. However, once a structure is selected, maintaining flexibility in the implementation phase of the strategic alliance seems to present a challenge.

The following diagram illustrates the findings for the types of strategic alliances.

Figure 4-5.- Types of strategic alliances



The diagram above illustrates that there are various types of strategic alliances and the structure selected is connected to the expected degree of flexibility. Alliances can be developed at different levels. The structure is constrained by objectives and legal and compliance requirements. Pilots and loose relations could be useful to get to know the partners and could test how well the parties might work together.

The following section presents the perceptions (i.e. motives) of interviewees in terms of their rational to enter into strategic alliances.

Motives (RQ1,3)

Interviewees were asked about the rational of entering a strategic alliance and what the motives or incentives were. Motives were organised under the subcategories of complementary, access, strategic, risks and capital, positives and negatives, and there were split motives mentioned in the value chain of oil and gas. This section explores the organisational rationales in the process of creating a strategic alliance and illustrates a key

finding that, despite the high failure rate of strategic alliances, they are still pursued by organisations.

Complementary (RQ1,3)

Some interviewees highlighted complementarities as a motive to enter strategic alliances in order to satisfy needs, provide skills or elements that create more value (the whole is greater than the sum of the parts). Alliances work more effectively when the objectives are complementary. It was highlighted that building capabilities takes time; therefore a strategic alliance brings in these capabilities via a partner. These points are illustrated in the following table of quotations:

Table 4-7.- Complementary (LR: Motives for the Formation of Strategic Alliances)

Key themes	Quotation	RQ
Satisfying needs	<i>Satisfying needs in some form of complementary way... (Interviewee 5)</i>	1,3
Complementary skills: the whole is greater than the sum of its parts (creates value)	<i>Complementary skills, where you actually do find a fit between two or more companies who can actually come together and Company A can provide certain elements which, when you add... Company B's contribution, the whole is more than the sum of the parts. (Interviewee 6)</i>	1,3
Alliances work better if strategic objectives are complementary	<i>I think one aspect would be to find an alliance partner which has got the same, well a strategic objective which complements one's own. And it doesn't have to be the same, in fact alliances probably work best if you don't have the same strategic objective. (Interviewee 9)</i>	1,3
Impact of time to develop capabilities	<i>Like you can't really build, let's say the capability so fast... But you have another party that has the capabilities... Building a capability takes time. Acquiring the capability costs a lot of money; perhaps not doable too. Developing a partnership, this is what I call an alliance, right? A partnership. Then it's an easier, perhaps, way... (Interviewee 14)</i>	1,3

These quotations illustrate that, as no single organisation has all of the resources necessary to exploit business opportunities, there is a need to look for a complementary partner to develop added value. The final quotation introduces the term 'partnership' as a synonym for alliance. This suggests that the concept is not perceived to have a definition which is limited by any specific discipline, for instance from a legal viewpoint.

The following figure summarises the findings of complementary motives.

Figure 4-6.- Complementary motives



Access (RQ1,3)

Some interviewees highlighted access to markets, technology, people, feedstock (the influence of governments and NOCs to provide access), knowledge (for NOCs as a way to increase the capabilities of people). These points are illustrated in the following table of quotations:

Table 4-8.- Access (LR: Motives for the Formation of Strategic Alliances)

Key themes	Quotation	RQ
Feedstock for processing purposes	<i>It could be a particular stream that is useful from a processing standpoint... (Interviewee 5)</i>	1,3
Influence of governments and NOCs	<i>Access to feed stock in the industry where you've got the increasing influence of governments and national organisations, national companies... (Interviewee 12)</i>	1,3
Knowledge as a driver for NOCs to increase the capabilities of people	<p><i>One of the reasons for developing strategic alliances, because you could learn or benefit from association with another organization... (Interviewee 11)</i></p> <p><i>NOC is actually – are also benefiting, because... they improve... the capabilities of their people... knowledge of the subsurface to develop products and optimise the field... better than they would have done without all this... (Interviewee 14)</i></p>	1,3

Therefore, governments meet their objectives for the development of natural resources and the transfer of knowledge through strategic alliances.

The findings on motives of access are represented in the following figure, highlighting the relevance of the influence of government on feedstock.

Figure 4-7.- Motives of access



Strategic (RQ1,3)

Some interviewees highlighted reasons that were categorised under strategic motives. These could be in the form of a pre-emptive move to prevent competition and protect position, a temporary arrangement in order to achieve an exit strategy, as a vehicle to deal with uncertainty in new markets and as a step for an acquisition, and using the alliance as a tool to gain an understanding of the business, or to build credibility. These points are illustrated in the following quotations:

Table 4-9.- Strategic motives (LR: Motives for the Formation of Strategic Alliances)

Key themes	Quotation	RQ
Prevent competition, and protect position	<i>Going into alliances with companies in order to prevent that company doing something with another company... (Interviewee 3)</i> <i>You could tie someone up for a while because you recognise that... if company X joined with company Y... your company would suffer. So you might make a pre-emptive move to try and do something about that. (Interviewee 5)</i>	1,3
A temporary arrangement to exit a business	<i>If two companies both want to exit businesses they may say, you know what, let's put out two businesses together, crash them together and sell the whole lot so we know this joint venture is a temporary arrangement. (Interviewee 10)</i>	1,3
A first step for an acquisition to gain understanding of a business	<i>So they could either have used a strategic alliance as a stepping stone to taking someone over to make an acquisition. But not being sure that they want to make the acquisition in the first place they will do the strategic alliance, get to understand the business of the person they are working with. And only then they make the offer to acquire. (Interviewee 7)</i>	1,3
To build credibility	<i>They don't have the credibility in – in building these capabilities. So they want to bring a party who has an existing credibility to fill the gap and say, "You know something? I don't know it myself, but I have my friend here who's – you know these people. You know they've been established in the space. (Interviewee 14)</i>	1,3

These quotations show some of the strategic thinking when a strategic alliance is developed. Taking into consideration that at least two organisations are involved, this confirms the importance of understanding the different motives of the participant parties as part of the process when developing a strategic alliance.

The following figure summarises the findings of strategic motives - strategic alliances were perceived to be a temporal agreement.

Figure 4-8.- Strategic motives



Risks and Capital (RQ1,3)

Some interviewees mentioned levels of investment, the need for capital and risk as motives to enter into strategic alliances, as illustrated below:

Table 4-10.- Risks & Capital (LR: Motives for the Formation of Strategic Alliances)

Key themes	Quotation	RQ
Levels of investment and risk	<i>Maybe it's particularly high levels of investment... I guess what all of these have in common, thinking about them, is that they're all areas of peculiarly high risk in one way or another ... (Interviewee 6)</i>	1,3
To diversify risk in the upstream	<i>Or also what it can also do is allow the reduction of risk. So if it's a particularly risky venture, like you often get in the upstream part of the energy pursues. Then you can get partners that ensure upstream activity to diversify the risk. (Interviewee 9)</i>	1,3
To share risk and access to capital	<i>To share a risk... So the kind of strategic alliances that I'm most familiar with – the main one would be a joint venture of the kind that oil companies enter into, to exploit hydrocarbons. And that is about risk- pooling, largely. It can, for some companies, also be about access to capital. For instance, a small oil company, which doesn't have very strong finances, will seek to farm out part of its interest in a license to a larger company that would have... the money to be able to explore and then develop that resource. And the smaller company will keep a small share of that – of that license that it can afford then to – to fund. (Interviewee 13)</i>	1,3

These demonstrate that the high level of risk and investment in the energy industry acts as

motivation for the development of strategic alliances.

The findings on the motives of risk and capital are illustrated in the following figure. In the upstream, risk-sharing and diversification was found to be a common motive.

Figure 4-9.- Risks and capital motives



Positive and negative motives (RQ1,3)

Data from some interviewees related to motives that were categorised under positives and negatives. With regard to the former, looking for an opportunity to fulfil as a way to move faster and to search for efficiency; and with the latter, to solve a problem as a defensiveness option or a way to survive. The case was highlighted where the only way for companies to access resources in some areas was by developing an alliance with NOCs. There was a negative perception from some Organisations who found that strategic alliances were not necessarily the best way to proceed and also alluded to the significant costs and difficulties involved in their development. This is illustrated in the following table of quotations:

Table 4-11.- Positive and negative motives (LR: Motives for the Formation of Strategic Alliances)

Key themes	Quotation	RQ
Positive motivation searching for efficiency	<i>Positive motivations are where companies look at their own resources and capabilities, and figure out that to make the type of progress towards an end state, towards a vision that they want to make... it's going to be very difficult for them to do that on their own. So they look and they start to think about strategic alliances as a way to more quickly or more efficiently... achieve what their vision might be to be able to move forward, so for the most part that's the positive motivation. (Interviewee 1)</i>	1,3
An alliance with a NOC as an opportunity to access resources	<i>Very often you simply can't get access to those economically attractive feedstocks, without having some kind of alliance with the state company or the national company. So, again, providing an opportunity, which wouldn't otherwise exist. (Interviewee 12)</i>	1,3
Strategic alliances are complicated due to difficulties	<i>When we talk to clients - we have a number of clients who are mostly refining companies or integrated oil companies - they really-they've said that they looked for strategic alliances but I think they're much more wary... when strategic alliance or help or... complicate</i>	1

and costs	<i>matters. (Interviewee 5)</i> <i>There are so many costs and difficulties of getting into an alliance, that you wouldn't do it unless there was a special reason to offset those costs. (Interviewee 6)</i>	
-----------	--	--

The figure above illustrates the findings of positive and negative motives. Efficiency was found to be a driver for positive motives and complexity and costs of strategic alliances were perceived as a negative motive from the viewpoint of interviewees. These quotations are important because strategic alliances could be a second option in the process of evaluating alternatives for organisations to achieve their goals, thus to keep the analysis of other alternatives as part of the decision making process could bring a continuous light when the context changes.

Figure 4-10.- Positive and negative motives



Value chain (RQ1,3)

One interviewee pointed out that the motivation to get into a strategic alliance could be seen differently according to the stage of the oil and gas value chain. This was interesting because the interviewee specified motives along the value chain. At the upstream level, it was more about access to feedstock and gave the sense that in a developing country it was common to form a partnership with NOCs. For refining from an Oil Company perspective, a strategic alliance could be used as an exit strategy. In the case of petrochemicals, it was about access to technology and markets.

Table 4-12.- Motives in value chain (LR: Motives for the Formation of Strategic Alliances)

Key themes	Quotation	RQ
Upstream, access to feedstock	<i>I think people might have different motives, that you see oil exploration... the motive for strategic alliance and the partnership its access to feedstock resources you would, as an individual player, normally not have. It could be a partnership with the state oil company in the developing country... to enter into a country, you team up with a partner and developed a market there, so you've had access from that point of view... (Interviewee 4)</i>	1,3
Refining, an exit strategy for an oil company	<i>Then you go into all processing of strategic alliance, here is refining, etc. might even mean that it is for you as an oil company, who has been active with downstream processing are ready to long term exit the business because you don't see a profitable business in the long term in the refining sector. so you try to find a partner who might at the end take over a business. That's why I say a strategic alliance very often has a definite timeline, so it's a more defensive approach. It's a very forfeiting- out scenario and could be a different motive again. (Interviewee 4)</i>	1,3
Petrochemicals, enter new markets or access technology	<i>In the petrochemical sector, I think if -, as long as the future position is okay, you don't need to be defensive and more really a gross perspective but you are entering into new markets. You gain access to new technology to follow certain, customer, trends and behaviours. and, then the motive is more on growing market share, growing the business and finding partners who allow you to have either access to better technology or to different markets. (Interviewee 4)</i>	1,3

The following figure illustrates the motives of the value chain in oil and gas. National oil companies were partners in upstream when looking for feedstock.

Figure 4-11.- Value chain motives



The following diagram brings together the findings of motivation in forming a strategic alliance.

Figure 4-12.- Motives for strategic alliances



The diagram above illustrates the categories of motives that were found in organisations entering into strategic alliances – the search for complementarities, time involved in developing capabilities, access to markets, technology, knowledge, people, risk-sharing, financial resources, prevention of competition, exit strategy and feedstock. Complementary objectives among parties seem to work better than sharing the same objective. Positive motives are connected with opportunity and efficiency; on the other hand negative motives are linked to the solution of problems, to defend or survive. Motives along the oil and gas value chain are different. Strategic alliances were perceived as complex and costly and therefore, for some organisations, it is not the first choice. This illustrates the relevance of understanding the motives of all the parties involved in a strategic alliance and of analysing motive as part of the process of developing a strategic alliance.

The following section presents the themes around the process for entering a strategic alliance, partner selection and portfolio management.

Process in Strategic Alliances

Three themes were explored with interviewees around processes for strategic alliances - the decision-making process to enter strategic alliances, the selection of a partner and the experience and perceptions of interviewees regarding the management of the alliances' portfolio. Process in strategic alliances will become the second element of the holistic process model as presented in the discussion chapter. The findings in relation to the process to enter strategic alliance and alliance portfolio management are presented next, and will become the sub elements of the holistic process model.

Decision to enter a strategic alliance (RQ1- 4)

The decision process to enter into strategic alliances was explored with interviewees. Findings were organised under 'business options' (as organisations review other alternatives to strategic alliances,) and 'strategic alliance process' (more detail is provided by interviewees about the decisions to enter a strategic alliance).

Business options (RQ1)

Some interviewees referred to a sequential process where the starting point is to decide to be in a business, then to look at the options available. These are: a) the potential of doing it in-house (Standalone), b) acquiring resources if they are not within the organisation, c) if not, to partner with someone else or acquire a stake in a company, and d) do nothing. These points are illustrated in the following quotations:

Now and again if you're saying I want to set up a new business, well the first thing is do we wanna be in this business and then we'll probably do it ourselves or do we need a collection of skills that don't exist. Can we go and acquire those skills or do we joint venture them or partner with and buy some because you can argue that buying a stake in a company as a partner is a strategic alliance. I might buy thirty percent and I will dabble in that market for a while but the first decision has to be the company saying this is something I want to do. (Interviewee 10)

I think you have to look at your options... one option is to go... stand alone and do just a local subsidiary or branch for a market entry. We can go and do a strategic alliance or a JV with a local company or individual. We can do it with a larger...a local enterprise, or we cannot do it at all. (Interviewee 15)

These quotations show that organisations consider a set of alternatives to achieve their goals. Considering the dynamics of the context, this step is integrated as part of the process in developing a strategic alliance because they take time to be developed and at the end there is no certainty of closing the deal, therefore it is better to keep a continuous analysis of the options.

The following figure illustrates these findings.

Figure 4-13.- Business options



Strategic alliance process (RQ1-4)

A majority of interviewees described different processes that organisations follow in making the decision to enter a strategic alliance. These processes were organised under: a Strategic approach, a Top-down process, Division level and Informal process. This is illustrated in the following figure.

Figure 4-14.- Strategic alliance process



Reviewing the strategy (RQ1)

One interviewee described the process as involving three steps: 1) reviewing the strategy and goals, 2) the strategic alliance as an option of achieving the goals, and 3) the selection of the partner. This is illustrated by the following quotation:

You start out as a company saying what's my strategy, what do I want to do. Let's say you want do X, the next question you'd then ask is well how can I do X...' ...looks at it fits within the core skills, the core market, all that...well how do we do it and then you say, you know what, the best way to do this is through partnership. Second step. Then the third, who's gonna be the partner and there were steps in the decision. (Interviewee 10)

One interviewee described the process followed in an organisation from the very beginning - the development of a strategic plan, where opportunities to growth are pursued, and the analysis of the options. These can be organic by investing in internal development, acquiring a company or engaging in a partnership. Some areas of the organisation involve a gate decision-making process. External actors are sometimes brought in to confirm decisions or support the process, this suggests some legitimisation. Then the decision goes to the Board and, if approved, is pursued for implementation. This is illustrated by the following quotation:

We do our strategic plan.

What we're looking here, is to see where there is growth... in a space... So we discuss it in... at product line level... Or sub-product line. The smaller product line, right? I'll give you an example. Product line X [name changed by the author] is one product line. It's made up by three sub-product lines. So let's discuss one, that's services. Let's say that in the service area, we discuss how we're going to grow...

...there are two ways of growth – three ways of growing. Either through internal, growth – organic. What we call 'New Product Introduction', NPI. So we invest money to develop new products. Or you go and acquire a company to – mostly the products. Or you develop a partnership with a company that provides the service, okay? So if we – then we – we do the plan.

We discuss it with the – with business development, the product management piece goes to the Product Manager, then they create a pearl gate process, where you actually... make a decision in different... number of steps.

And... the BD is actually either M&A or... partnership. Then... we start really looking externally...

Sometimes you'll bring Strategy Consultants in. Sometimes you'll actually get investment banks involved, only to get some ideas. But they don't tell us anything that we don't know, really. They reconfirm what we know, usually.

And secondly, is they help us in doing due diligence

put the right people – put horsepower where we don't have the horsepower. We have the ideas, we have the knowledge, but everybody has got a day job.

Then we've got to develop an – a proposal, okay? We're going to take it up to the Investment Board. Then we're going to discuss it in the Investment Board. And once we get the 'okay', then the BD has the opportunity to go outside and say, "I have the authority now.... (Interviewee 14)

Previous quotations show in detail the process followed by some organisations in the development of a strategic alliance - decisions require some levels of approval and sometimes there is a need to bring in external people to legitimise the process. The following figure illustrates these findings.

Figure 4-15.- Strategy



A Top-down process (RQ1-4)

A particularly insightful comment from one interviewee described how the initiation of a strategic alliance discussion starts at the CEO or board level. It also points out that the more actors involved at the beginning, the more challenging it could be for a project's development. The selection of potential partners is often delegated to expert teams. Due to confidentiality or secrecy, there is the view that the Board takes pre-eminence over the strategic alliance. Sometimes consultants are involved in order to assist the decision, but the Board has the last word. This is illustrated by the following quotation:

I think, first of all, what you see is the definition of what is really the strategic fit between a potential partner for such a strategic alliance, and your own position, and the first thing to really specify what you want in order not too overload a potential project and make it unlikely to happen because the broader you try, the more players are involved from business-, from different businesses, from different R&D, technical manufacturing organizations, etc... so what my experience is that... the initiation of a strategic alliance discussion very often comes from the top, maybe the CEO or the board. They see a deficit in your own organisation. They see a deficit in the competitors positioning of the company, and start to monitor the market, who could be eventually of help and who might be an interested partner. So, that initiation usually, I would say, comes from the top. The selection of potential partners is then often delegated to experts teams that, when they get the task and say it's okay, just give them a mark about who is strong and in which areas. If for confidentiality reasons or for secrecy reasons, it should be made on the top level then also I've seen that consultants are approached to come in and come up with proposals ranking top of exercises following different criteria; who might be good in fulfilling one or the other of our requirements and at the end, before the contractual relationship is established, I think it's really the board who decide, "Yes, this is an important business prospect for us. We cannot win alone. We need a partner and from the shortlist of proposed partners, this is the one we then approach" and that's a rather popular decision. (Interviewee 4)

This quotation confirms the relevance of understanding needs and wants as part of the process. It also provides a different perspective on how the decision to enter a strategic alliance is made.

Some interviewees described the process as a top-down process, and expressed the importance of keeping the strategic fit by employing a continuous process of tuning and adjustment to accommodate change. Another interviewee described the process as unique, pertaining to the particular opportunity. This suggesting the consideration of the context and is illustrated by the following quotations:

I would describe as a top down process where you know perhaps it's in the corporate planning mode or executive level where the need is perceived you know where the strategic thinking is going on and there's a perceived need... and you know the process really works out to the root of the company and they go and execute it. And you know that I think works so far. One of the things that works is if the two companies in the alliance or more than two. If the companies involved in the alliance if they are continuing to re-calibrate and adjust... so that there continues to be a strategic fit.

And so that top down approach is pretty useful and pretty helpful in that respect in as much as it has... alignment with whatever the other firm is. (Interviewee 5)

Tend to be dealt with by senior groups, maybe strategy groups, business development groups who are like special project groups working at a senior level, at the Executive level. And rather than a standard process, they'll follow a process which is kind of dictated by the particular opportunity. (Interviewee 6)

This quotation highlights the relevance of acknowledging change and of implementing a continuous process of tuning and adjustment along the life cycle of the alliance as part of the development process.

The following figure summarises these findings.

Figure 4-16.- Top down process



At the Division level (RQ1)

One interviewee gave an important insight into the way decisions are made in large organisations. This is a very formal process, where several areas come together when a potential opportunity is assessed at international level. In this case, the process started at the operating unit (division) level, and then progressed to the corporate level. This acknowledges that the process can vary depending on the size of the company, its operation, legal structure and relevance. There are certain agreements that can be carried

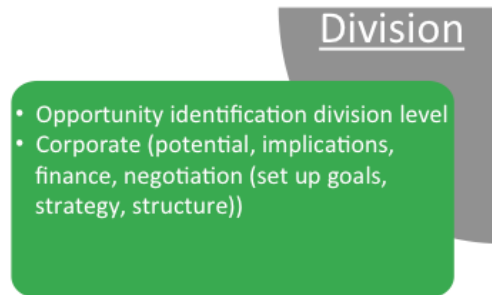
out locally, for instance a licensing agreement. The process varies from company to company and is dependent on size, as illustrated by the following quotation:

This varies significantly by company... the size of the company... is there a formal planning process, is there a capital budgeting process, are there recognised goals and objectives shared by the management... a company A size [Name changed by the author], and of course I can speak just of that or Company B [Name changed by Author] size. There is a very formal process whereby this might come up through an operating unit, ...so then the refining group... comes to International Strategic Planning which I was running at the time that tells me that they see this possibility. So we need to look at what other potential there is with Company A [name changed by Author], what the implications are, how do we want to do this from a finance point of view, do we want to merge the two refineries into a separate company, do we want to just go on a joint venture, or do we just want to have a contract that we jointly build the pipeline and have an agreement to switch so much crude under certain circumstance, so much feed stock under certain circumstances... it's a difficult negotiation. But you have to, you set up the goals and objectives, you set up the strategy, you set up the kind of structure you would like to have and then pursue it...but the process again, the process on the refinery started with the refining, the manufacturing units...where we ran our operations, came up to corporate, came up through the international ranks. It was a very formal process, So it depends on the size of the company, it depends on the size of the operation, it depends on the size of the organisation of the company, the legal structure, and how much you are trying to bite off. If you are just doing the licencing agreement you can do it locally... So again size matters... (Interviewee 3)

This quotation demonstrates the diversity that can be found amongst organisations in the process of developing a strategic alliance. Different configurations of the organisations can influence the process, for instance size influences the formality. This highlights the challenge to develop a process that can accommodate different organisations.

The following figure illustrates these findings.

Figure 4-17.- Division level



A more informal process (RQ1)

One interviewee pointed out that the process varies from company to company. Strategic alliances are considered viable options in seeking to achieve objectives and overcome organisational deficiencies. However, this is not a formal process, and the first consideration is to work independently, provided that the budget is not a constraint. This is illustrated by the following quotation:

I can well imagine it's different in other companies... we specifically look at alliances to address aspects that we're deficient in getting access to ourselves, on our own. So we tend to have an approach of if we can do it on our own we will do it on our own...there's not a formal process in place, to find, to, the budget which tells us when whether we want to do a strategic alliance or not. But more, also that when we look at what we want to achieve and see where's our own proficiency, then start thinking about could a strategic alliance possibly help us to make up that deficiency. (Interviewee 9)

One interviewee pointed out that sometimes the process could move from an informal and flexible process to a more rigid approach. The interviewee indicates that the magnitude of decision-making and the resultant economic impact makes the energy industry different from other industries. This is illustrated by the following quotation:

Well I think the energy sector, you very quickly move from a scouting phase, a data collection phase. Which is inevitably informal and quite flexible and quite free thinking into a very formal process. I think generally whenever you're working in any energy activity you're in big numbers and you're into national economies one way or another. So inevitably it runs quite different from alliances in other industries, in other sectors of the economy. (Interviewee 12)

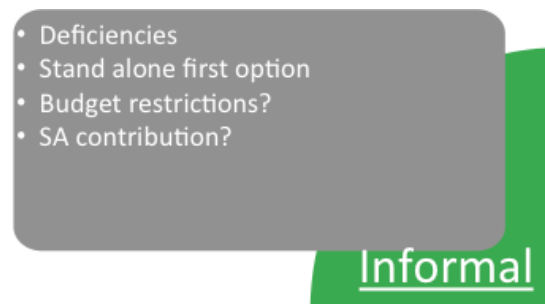
Another interviewee illustrated the case of oil operators, where there are decisions gates involving various levels of the organisation according to financial commitments and potential risks.

Oil companies – operators in particular – take any decision involving significant financial consequences, is that they will have a series of decision gates involving various levels of management, depending on how much money is at stake and what the risks are. (Interviewee 13)

These quotations confirm the diversity in the process followed to enter a strategic alliance, by contrasting the formal process described in the previous section. An informal process sometimes evolves to a more formal one; this suggests flexibility and adaptability accommodate the context. The perception of the energy industry being different from other industries highlights the need for more research.

The following figure presents the findings of an informal process.

Figure 4-18.- Informal process



Considerations (RQ1-4)

Some interviewees highlighted the need for senior level involvement and approvals, and the relevance of communication:

But a significant strategic alliance, I would expect would need very senior managerial approval. (Interviewee 13)

Putting together your strategic plans, either in the business, or in a process, or in a function, or if you're organized with an international division...

They may engage in a consulting firm

*I need to have a local partner.” You go to the board of directors and say, “This is what we want to do
 Why don’t you go and find a local partner and then come back to us, and if we do a formal arrangement with the local partner, the board of directors will probably have to approve it.
 a lot of due diligence is what you need and the due diligence that you do need to match up with what your company’s objectives are for a good partnership, so the most important thing is great communication. (Interviewee 8)*

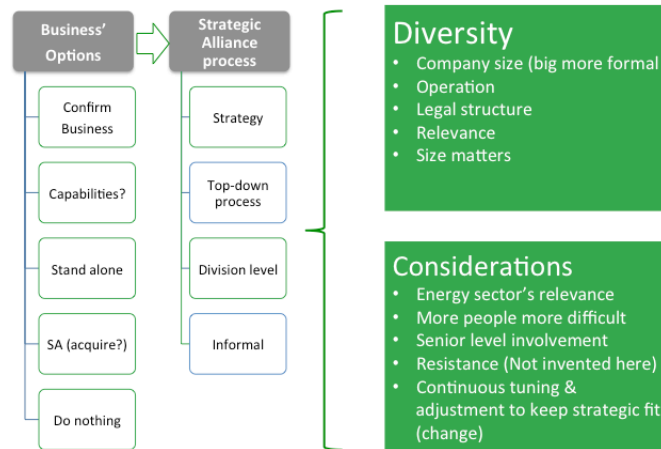
This quotation shows that the analysis of a strategic alliance requires a high degree of effort and support at the senior level.

One interviewee highlighted that there are some instances where the development of the process can face some resistance. He illustrated the case of technology alliances where the effect of ‘not invented here’ imposes some resistance and challenges the development of the alliance, as illustrated by the following quotation:

You have that, sort of, defensive reaction in the R&D environment as well but we are convinced there is a better option. We can do things better. We need a bit more time but we will achieve even a more prominent technology status and actually more competitive or cost whatever. They try to defend their own case with, I mean, logical motives, securing your own programs, your own funding, etc. Um, so as I say, in general, the closer you are to the technical disciplines, I think the higher the resistance is, the more-, the closer you are to the business side of it. People really see more the added value of being in a market faster, offering a more extensive package and creating through a strategic alliance a competitive advantage. (Interviewee 4)

The following diagram summarises the findings of the process of entering a strategic alliance.

Figure 4-19.- Entering into strategic alliances



The diagram above illustrates the first step as described by interviewees - looking at the business options. It then shows the various decision-making processes involved in entering into strategic alliances. It represents the influence of diversity and complexity in the decision-making process. Considering the uniqueness of each strategic alliance and the diversity and complexity of its development, it seems that a flexible process framework is required to improve the understanding of strategic alliances from a multiperspective and process approach.

The following diagram brings together the detail of the strategic alliance process.

Figure 4-20.- Strategic alliance process



The diagram above presents the four different processes described by interviewees in developing a strategic alliance. These processes can start as reviewing the strategy, a top-down process, at the division level or a more informal process.

The next section presents the characteristics and considerations involved in the partner selection process from the perspective of interviewees.

Partner selection (RQ1-3)

As partner selection is a critical stage in the development of a strategic alliance, I explored interviewee's perceptions of this theme. Findings were organised under the subcategories of Process, Characteristics, Context and Considerations.

Initial steps in the selection (RQ1)

Some interviewees described the initial steps in partner selection through developing a SWOT analysis to assess the capabilities of the organisation, then looking for different partners with complementary capabilities.

We sat down with the team and we looked at our strengths and weaknesses, we did a typical SWOT analysis, you know we said where are our opportunities, where are out threats. We looked at our own company and tore it apart to its basics...Then we looked at various partners...and...became such an obvious choice, because where

we had massive amounts of capabilities (Interviewee 3)

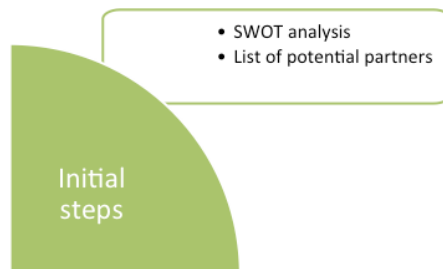
One interviewee pointed out that a list of potential partners could be developed according to the specific objectives of the project or business to be pursued. He also alluded to an experience where his company was looking for a large organisation with capital and shale expertise, a strong market orientation and government connections. He expressed this in the following quotation:

I think depending a lot... on what you are doing, really. There could be a list of JV obvious candidates and strategic very well established, very mature, and you could almost use the description as usual suspects (Interviewee 2)

The above quotations illustrate that, in general, the process of partner selection seems to be very straightforward. However, as presented in the following subsections, the details surrounding what to look for are more complex.

The following figure summarises the initial steps for partner selection as highlighted by the interviewees.

Figure 4-21.- Initial steps



Context for partner selection (RQ1-3)

Some interviewees pointed out that the context of the strategic alliance affects the partner selection characteristics, as illustrated in the following table of quotations:

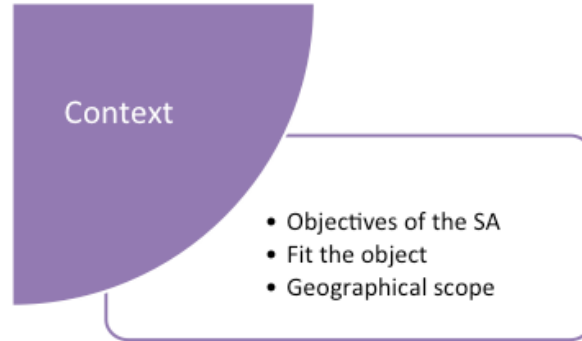
Table 4-13.- Context for partner selection (LR: Partner selection)

Key themes	Quotation	RQ
Dependent on objectives	<i>Depending on what it is I am looking for that is how I am selecting my partners. (Interviewee 3)</i>	1
Fits with the objective	<i>What are you going to do, why do you want a strategic alliance and... what do you want to achieve by it? And that in turn has to be a function of your own basic strategy... what is the company that's looking.... for the strategic alliance, what is it choosing to achieve?'... so it's basically fit with the object..., the things that you're looking to get out of the joint venture. (Interviewee 4)</i>	1
Characteristics according to a geographical scope, from global to regional:	<i>If your partner is... global versus being regional? You may have a regional partner, who has different characteristics... a regional partner would be somebody who has very detailed understanding of regional customers... of executing countries... Whereas the global player will be somebody who brings technology. (Interviewee 14)</i>	1
Contextualised according to the objectives, partners will need to bring something more than connections, something to improve efficiency, access to channels or customers	<i>Be clear on what's the objective, and be clear on... what you need, and what of what you need is what you do not have... And then look for a partner... that can bring that. There is, at least in my experience, a lot of times... you get calls and... the guy says, you know "I want to be your representative here. I want to establish a strategic alliance with you. I want to be your agent. I want to establish a JV," and you say, "So what do you bring to the table?" And bottom line...the guy brings nothing other than connections... And yes fine, it's something you don't have; you don't have the local connections, but that, to me, is not an enough motive... to do a strategic alliance... if you're going for one it... they need to bring something to the business that would allow the business to operate it, more efficiently or have access to distribution channels that they don't have, or have access to customers that they don't have; something more than just connections or a typical agency type agreement. (Interviewee 15)</i>	1

These quotations illustrate connections with the findings of concept in terms of considering the objectives of the alliance. This shows that the strategic alliance process is a dynamic and iterative process.

The following figure summarises the findings about Context in partner selection.

Figure 4-22.- Context for partner selection.



Characteristics of a partner (RQ1-3)

A majority of interviewees pointed out various characteristics when looking for a potential partner. Interviewees mentioned capabilities, experience, cultural compatibility, resources, contribution to the objective, resources, track record, ability to deliver, similar mentality, cultural and emotional fit, trust and empathy, values, compliance with authorities and being able to work together. These points are illustrated in the following table of quotations:

Table 4-14.- Characteristics of a partner (LR: Partner selection)

Key themes	Quotation	RQ
Capabilities	<i>You're looking for capabilities that you don't have... If I am looking for a partner it is because I can't accomplish something myself, one either it's too expensive, two I don't have the manpower or the resources, three I don't have the technical capabilities. (Interviewee 3)</i>	1,3
Experience, cultural compatibility, resources, and compliance with authorities	<i>If you're looking for joint venture partners, you will be looking for a number of things. You will be looking for people with relevant experience. You will be looking for people whose culture you think is compatible with your own. People you think you can do business with. And people with the right amount of money. People who are not likely to be the subject of objections by the authorities, because the authorities will need to approve the licensees. So people who satisfy the thresholds of the authorities. If you're looking to carry out a joint venture in a particular technology, then you're looking for the people with the skills in that technology. (Interviewee 13)</i>	1,3
Partner should contribute to the objective	<i>You've got to identify somebody who helps you address the particular challenge you're looking for... you have to be able to work with them both in procedural and culturally. (Interviewee 12)</i>	1,3

Main characteristics: 1) resource, 2) track record of working with strategic alliances, 3) ability to deliver, 4) Common mind-set	<i>1) They've got the resource that you want and that means that you understand that they've got the resource that they want...2) Is a track record of working within strategic alliances you are looking for a person that is comfortable working where they're not necessarily in control. So where there's shared control, shared decision-making in that sense of the word and 3) they can actually deliver what they've undertaken they will deliver... And I guess 4) is the tough-there's an element of common mentality of mind set in other words you're never going to have a perfect alliance of... mindset, of expectation from the joint venture. You're looking for someone that's got a similar mindset, similar objectives and you get the feel they can be achieved. (Interviewee 7)</i>	1,3
Industrial logic to create value and with an emotional and cultural fit. Trust and empathy as relevant factors for an effective collaboration	<i>Industrial logic to partnership, so as they think about their business, or think about their geographic footprint, or think about the technology, or the manufacturing plant*, whatever it might be. It* needs to make a logic... And saying okay if there was no ownership limitations what's logical in terms of collaboration... Is there a logic that you could say wow if those two technologies were together, or if those two plants were together, or if these two companies cooperated in such and such a market, within legal limits of course. But if there was a logic to say that would be good, that would create value. So that would create value for the customer of course ultimately, and would create value for the two companies.</i> <i>I would say cultural and emotional fit. So are these two companies likely to be able to collaborate in a good, in a positive way. Or are they going to be difficult to make that happen, are they going to be so lacking in trust with each other, or lacking in empathy for each other that in fact the potential benefits of the alliances in the industrial logic won't be realised, because of the personalities involved, or because of the cultures of the two organisations, or whatever it might be. (Interviewee 1)</i>	1,3
Similar values, such as honesty. Values start to become apparent as the partnership builds	<i>First one, which isn't always explicit, but this is my personal point of view. It is values, company values. As well as that aspect I would also look at, on the extreme you clearly can't work with a company who's got dramatically different values to your own... So if you're a company that puts a lot of emphasis on honesty for instance, there is no way you can work with a company that doesn't have the same attitude to honesty and so on. So I mean one doesn't normally see it upfront immediately, but as you build a partnership and so on, you get an idea on what the other party's values are. (Interviewee 8)</i>	1,2
Values, compatibility in objectives and exit planning.	<i>Values. Commonality of interest isn't quite the right expression. It's understanding that their interests and your interests are – it's not aligned, it's compatible. They may be wanting something different out of it than you do but it's compatible with what you want. They may be wanting to be exiting a market and you want to enter. Now</i>	1,2

	<i>they appear to be the opposite but they're compatible because you're helping them in a two stage process joint venture... if it goes wrong, how are we likely to be able to solve it and, that's something every Board entering into a strategic alliance has to ask itself. What's the exit. (Interviewee 10)</i>	
Compliance of rules and expectations due reputational risk and potential financial issues. Ethical compatibility	<i>I think key particular for western companies and US companies is you've got to be absolutely sure that your partner is prepared to put in the same effort as you, and rules and expectations as you are. And particularly as you're moving into some of these very large contract based alliances, where a lot of money is moving around, the reputational risk of an alliance failing or being held up in the press because of bad behaviour, or indeed the litigious pace of the US regulators. Where if you're found to have transgressed in best practice, or bribery or whatever it might be, or code of conduct. Then the financial fines on the organisation are very onerous, and very punitive. So ultimately you've got make sure you've got the ethical relationship with your strategic partner which meets with your own. With your own value systems. (Interviewee 10)</i>	1
Track record or reputation, sharing goals or vision and ability to work together	<i>Whether or not they have a good reputation, whether they have a good track record. Whether they are the best in their field. Whether they are same sort of goals or visions to achieve something... sometimes it's whether or not you've got a good relationship with them, because it's also about being able to work well together. (Interviewee 11)</i>	1

The quotations above reflect the different characteristics of a partner. A mixture of hard and soft characteristics, they require a subjective measurement. The following figure summarises the characteristics for partner selection as mentioned by the interviewees.

Figure 4-23.- Characteristics of a partner



Considerations for partner selection (RQ1-4)

Some interviewees highlighted several interesting points to be taken into consideration when selecting a partner. One interviewee illustrated a case that the industry is predominantly characterised by those with scientific backgrounds and this influences the selection of a partner. However he felt that ‘softer’ elements need to be considered. Another interviewee pointed out the need to understand the motivations of potential partners as these might influence the performance of the strategic alliance. One interviewee highlighted that alliances became more complicated as the number of partners increased. These points are illustrated in the following table of quotations:

Table 4-15.- Considerations for partner selection (LR: Partner selection)

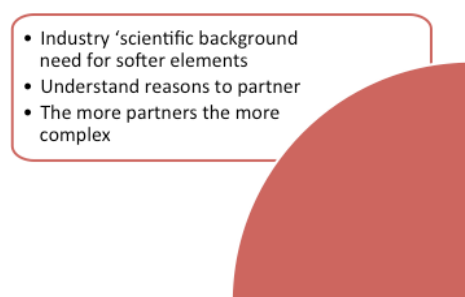
Key themes	Quotation	RQ
Industry rationale background influences the selection; there is a need to look for ‘softer’ elements	<i>In our industries which are dominated by engineers, and scientists, and people with technical mind-sets... there is a simplifying assumption that if there is an industrial logic... Often without really thinking about that emotional side in terms of will this relationship work, are these people going to be able to dance together...because we are logic driven, maths engineering, science types of people generally. But we don’t really think a lot about those softer elements of whether or not things will happen. (Interviewee 1)</i>	1,4
Complementarities in partner selection is important but the	<i>A company looks for a partner because it has a need. And of course you know a good partner will also have a need. These things tend to be complementary. The requirement of any partner can be a tricky thing because you know its one thing if</i>	1,3,4

reasons for it can result in difficulties for the strategic alliance	<i>they need access to something in a good sense you can kind of create a code of conduct and you can create a strong bond between the two companies. But on the bad side you know you may find that the company you're trying to partner with has a need but that's because they're in bad shape and they have a broken strategic process and there are other problems there, and so you know they're more needy than one would suspect and that can create the you know an underlying problem that would lead to the alliance you know falling apart or being less effective than it should be. (Interviewee 5)</i>	
More partners bring more complexity	<i>One is the less partners, the better because you cannot do a thing of strategic alliances, which go beyond two partners, which is rather complicated because then you have rather complex management, challenges to keep all the partners, abreast of developments and to keep them all involved. So, the less partners you have, the better, so if you have two partners, it's good. (Interviewee 4)</i>	1,2

The quotations above provide an explanation as to why the energy industry does not seem to take softer elements into consideration when looking for a partner. Also, these quotations raise issues of complementarity among partners and the increase in complexity as the number of partners increase. It seems that a multiperspective process could accommodate the different perceptions of organisations in a strategic alliance.

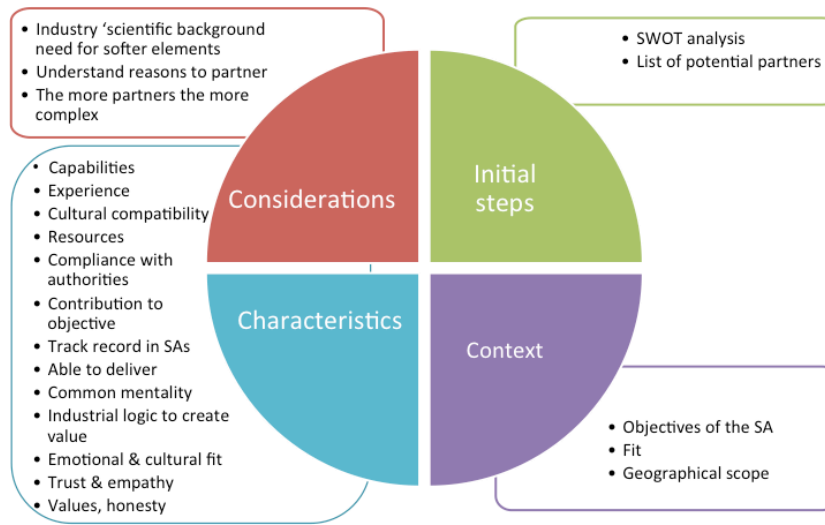
The following figure summarises the considerations in the selection of a partner.

Figure 4-24.- Considerations for partner selection



The following figure brings together the findings for partner selection.

Figure 4-25.- Partner selection



The diagram above represents the initial steps for partner selection, the consideration of context in terms of the objectives in order to determine the characteristics of a partner, and the characteristics themselves as mentioned by interviewees. Some considerations in the selection of partners need to incorporate softer elements, understand the reasons for partnership and acknowledge that the more partners a strategic alliance has, the more complex it could become.

One area of interest is in the way an organisation manages the portfolio of strategic alliances. In order to gain some understanding of this, the findings of this theme are presented in the next section.

Portfolio (RQ1,2,4)

According to the literature review, alliance portfolios are one of the areas that require further understanding. Interviewees were asked about their perspective in terms of the ways to manage portfolio alliances.

Strategies (RQ1,2,4)

Some interviewees described a variety of strategies to employ in the management of a strategic alliance portfolio. One interviewee suggested that an executive with experience

could be assigned as a Board member of various strategic alliances in order to identify what works across the alliance. This is illustrated in the following quotation:

One of the things that I've seen some companies' do that have no problem is that they take a senior executive and his or her sole job would be to be board members on these various different companies. So, you might take somebody who's been a vice president or an executive vice president or something at your company for a long time and they have experience in your company then you say, "Okay, starting tomorrow, you're going to be on the board of directors of these seven partners that we have." That's your job.

That is very good in terms of getting a person a lot of experience very, very quickly and seeing what works and I like that as a model.

Not all companies have the ability to free up an executive like that but it's a good way to do it. (Interviewee 8)

The previous fragment illustrates a strategy where an executive is appointed to the Board of different partners in order to understand the management of various alliances and identify opportunities for improvement by comparing experiences among alliances in the portfolio. This strategy benefits the learning process of an organisation with various alliances and it is advisable to consider it as part of the process of implementation.

Another strategy to manage a portfolio is to have a group of people who are appointed to sit on the Board of the partnerships, in addition to their current role. However, there is an acknowledgement that this could be difficult:

What's hard to do is to take a whole bunch of people and say, "In addition to your regular job, I want you to be a board member" and you've got, you know, fifty people who are doing that. Some of those people may not be that connected to the corporation because they're, you know, a manager out in another country or something else like that. It's harder for them to manage that in line with what the corporate objectives are.

It can be a good experience... tool but it's not necessarily a good tool over time. (Interviewee 8)

The quotation above highlights that this strategy is harder to develop because the people involved prioritise core activities and suggests that, in the long run, this is not the best strategy to implement.

One interviewee pointed out that one way to manage a portfolio is to build capability across all levels of the organisation, as expressed in the following quotation:

Well I can tell you how we did it, whether we did it the right way or not. Effectively what we had was, in our case a core of people. So I was leading, for example, the international business, which was middle east, south America and Asia Pacific. You'd have a core of people on management team who would sit on various boards or advisory committees or joint ventures or alliances. The way we approached it was to go in at a number of different levels in terms of oversight. So there would be people on the alliance board, so formally director positions. Or company directors, sitting on the board of those alliances. Then we would also have deeper oversight through health and safety. People looking at HR practices, looking at the finances. So the committees of the board, would be populated by the people as well. So you would start to build up a capability within an organisation. To get a feel for your portfolio, what is going well, what's not going well. Why things might be working versus not working. Very quickly then you can move people around from one to another. But you need to build that skill set. Build a skill set of a group of people to operate. You get the governance structure on alliances. Quite a broad sector which those people aren't working right across. Very different cultures and very different times. (Interviewee 12)

The fragment above illustrates how an organisation dealt with an alliance portfolio by building capability and a net of information across alliances. This was achieved by having people in different positions in the alliance looking at different disciplines and at a certain point making this system dynamic - exchanging personnel so they experienced other alliances. One of the perceived benefits of this is the exposure to different cultures and a deeper understanding of different ways of working. These findings show there are various strategies to manage an alliance portfolio. An organisation with a certain number of alliances in its portfolio has to work with partners with different systems which requires flexibility and a certain capacity to adapt.

The following figure summarises the findings for portfolio strategies.

Figure 4-26.- Portfolio strategies



Tools (RQ1,4)

One interviewee provided interesting details on useful tools in managing a portfolio of strategic alliances. He pointed out that when a company starts to deal with several alliances, a systematic risk analysis and compliance check-up is useful to identify gaps among them, as illustrated in the following quotation:

We sort of woke up one day and realised we had a lot because they'd been made in different businesses. You realise there's actually quite a lot of this business is in effect in some form of strategic alliance so we recognise it's one of the corporate risks. You know you have to do a risk analysis... so we added joint venture management....

We'd got the Company Secretary to make sure all the joint venture companies were complying with the rules that we need them to comply with because if the other partner wasn't a UK listed company it might have a different set of rules that might be lower so we had to do a more systematic – we've got twenty, let's make sure that somebody looks at each one and says tick tick tick – an example would be the Bribery Act. Have they all got their – do they need procedures because they're stand alone businesses or have they all got them. If they haven't got them, here's one you can use.

There is an example that you had to be systematic and tick them all off. (Interviewee 10)

The excerpt above also highlights that partners who are not listed companies might have more flexibility as regards rules; standards therefore have to be reviewed to be certain that compliance is accomplished.

There was a recommendation to run internal audits in order to check the alliance:

'Internal audit is another example. Do you audit your joint venture businesses and how do you do it and there are a variety of different models.

In the case of Company A [name changed by author], what was agreed right up front was, it would employ three internal auditors but they would be managed by the Company B [name changed by the author] internal Audit Manager but they would have their own programme reporting to their Audit Committee but the internal – but they weren't doing – they didn't need a Manager so ten percent of his time was charged then as a management service to run their internal audit programme but it was their programme. He had a duty of care to them although I couldn't say Company A will do that audit, the audit can be if Company A did.

In another case... the agreement – there were I think four partners – each partner did an audit each year and the internal audit – there was no cross charging. You just each did what – and the internal Audit Managers would just – they'd go, well we did this last year so why don't you do this and it would be presented to the Board done by one company and then in another case you'd say we're just going to do it at our cost because we have a requirement because that's sufficiently important for us. It may not be for you but we're going to do that for us. (Interviewee 10)

The excerpts above exemplify two ways of conducting audits for an alliance. In one, a special team is appointed to carry out the audit, headed on a part-time basis by the internal Audit Manager of one company. The other case is where partners agree that a different partner will run audits each year. Irrespective of who conducts the audit, it is important to highlight that an audit process could be implemented in order to control the portfolio.

The findings are illustrated in the following figure.

Figure 4-27.- Portfolio tools and challenges



Organisation (RQ1,2,4)

Some interviewees highlighted a number of ways to organise the portfolio of strategic alliances. One interviewee suggested that a portfolio could be organised according to regions or countries, depending of the size of the organisation.

Depending on how big they are, they will tend to divide their portfolio up into regions or countries, each of which will be individually managed. But when it comes to investment decisions – major investment decisions, there is definitely a degree of competition for... investment... funding. (Interviewee 13)

The excerpt above is interesting because it contextualises potential conflict with the core business of an organisation and its alliances and highlights the challenge of competing for resources among them.

One interviewee pointed out the complexity of managing a portfolio of alliances. He stated that oil and gas companies develop a structure which is divided into operated and non-operated assets. Non-operated assets are outside the core business, this gives the advantage of focusing on the core business:

Very difficult, very difficult... if you look at operators at oil and gas companies, they typically divide themselves in operated assets and non-operated.... And the non-operated assets, they are basically joint ventures where they just have an equity stake, and they manage those... almost completely outside the core business by a separate team. I think that is a clean way to do it. It keeps your business separate... And it puts focus...management focus on making that joint venture successful. If you're going to commingle that with your own business..., I think it becomes quite difficult because you will always pay more attention to your own business. You will always think that your partner is dragging you down. So, I think it's best if you, not spin it off, but put it aside and dedicate its own management resources even if...whether you're driving it or just being a silent partner. (Interviewee 15)

The previous fragment illustrates a case where oil and gas companies allocate a separate management team for non-operated assets in an alliance.

The findings with regards to Organisations are presented in the following figure.

Figure 4-28.- Portfolio organisations and challenges



The findings for portfolio management are integrated in the following figure.

Figure 4-29.- Portfolio management of strategic alliances



The diagram above summarises the findings for the portfolio management of strategic alliances. Some organisations built capability to manage alliances. This involves preparing people who can spend time at Board level so they learn from each alliance and thus benefit the portfolio. Other companies prepare managers across various levels of the alliance. Risk analysis and compliance check-ups are tools that can be implemented in order to identify gaps in compliance and so better control the portfolio. In early stages, this can be seen as a preventive action. Audits can help if organised by reaching an agreement with the partners.

This can be seen as a corrective action. Portfolios can be organised geographically or, as in the case of oil and gas, as operated or non-operated assets. An organisation with several alliances can face the challenge of dealing with different cultures, ways of working and compliance standards. An additional challenge for a portfolio is the competition for resources that can exist amongst both the alliances involved and with the core business of the organisation. The competition amongst alliances in an organisation requires careful analysis when deciding whether or not to enter other strategic alliances. It is important to make this analysis a compulsory step in the process of developing strategic alliances.

Conclusions

This chapter has built the concept of strategic alliances from three foundations: Meaning, Types and Motives. It has presented the findings for process in three areas: how organisations go through the decision making process to enter into strategic alliances, partner selection and management of strategic alliances portfolios.

The meaning of strategic alliance is broad, the definition that emerges by consolidating the perception of interviewees is that a strategic alliance occurs when at least two companies collaborate seeking similar objectives or goals, complementarities and the pursuit of either mutual benefit or the development of a competitive advantage.

The strategic component has a different and relative importance for each party involved in a strategic alliance. There should be a search for a continuous strategic fit to accommodate change.

One of the key findings is the connection between the broad definition of the concept of strategic alliances and their success and failure. This leaves some room for differing interpretations on how to measure these. These findings reflect the diversity that has been shown in the literature regarding the meaning of strategic alliances.

There are several types of strategic alliances: technology, supply, research and development, operational, market, licensing, joint venture (incorporated or not). Alliances

can be developed at the organisational, country, industry or international levels. Types of strategic alliances are influenced by the objectives, desire for flexibility, compliance and time. There is always the opportunity to start a strategic alliance as a pilot in order to get to know the partner and, if adequate, evolve into a more formal or larger agreement. The literature shows that researchers have the same concern about the flexibility and the degree of freedom imposed by the type of strategic alliance chosen.

Organisations are driven by different motives to enter strategic alliances such as a search for complementarities, time involved to develop capabilities, access to markets, technology, knowledge, people, risk sharing, financial resources, competition prevention, exit strategy and feedstock. Complementary objectives among parties seem to work better than sharing the same objective. Positive motives are connected with opportunities and efficiency. On the other hand, negative motives are linked to problem solving, defence or survival. The same theories found in the literature review are useful in explaining the motives that emerged from the insight of interviewees.

The energy sector has a greater importance than other industries in terms of the economic, political and social dimensions; therefore government influence is expected to be more important. In order to gain access to feedstock, companies sometimes have to develop a strategic alliance with the National Oil Company in developing countries. Risk and financial resources are, in general, the common motive to enter into strategic alliances in the upstream. Strategic alliances are sometimes perceived as complex and costly and therefore not the first choice for some organisations.

Organisations look for different options to achieve their objectives, for instance in growth. Strategic Alliances is one of the options. When entering a strategic alliance, organisations make decisions in different ways and follow different processes. These can run from very formal to informal processes. Strategic alliances in the energy sector are perceived to be different from strategic alliances in other industries due to the magnitude of decisions and their impact on countries' economies. These findings show different perspectives on how to develop the process. As mentioned in the literature, authors describe different stages in the development of strategic alliances which demonstrates the need to develop a new holistic process framework.

The selection of partners is carried out in accordance with the context and objectives of the strategic alliance. The complexity in managing an alliance increases as the number of partners increase. There are different characteristics to consider in selecting a partner, for example trust and empathy. Strategic alliances do not always work well, it is therefore important to plan for failure and design an exit plan. The energy industry is characterised by those with rational and scientific backgrounds, yet a softer perspective to assess relations needs to be considered in order to make strategic alliances work more effectively.

A company with several alliances faces the challenge of dealing with different cultures, ways of working and standards to comply with. Different strategies were suggested to manage a portfolio and its complexities. The combination of implementing systematic tools, such as risk analysis, and audits could benefit the management of alliances' portfolios. Shared learning among portfolio managers would contribute significantly to the success of alliances. These findings contribute new knowledge to portfolio management literature.

This chapter presented the findings for the first two elements (Concept and Process) of the holistic process model that will be presented in the discussion chapter. Both elements contain sub elements. For Concept these are: meaning of strategic alliances, types and motives; and for Process: decision to enter a strategic alliance, partner selection and portfolio.

The following chapter presents the findings for Performance which is the third element of the holistic process model.

CHAPTER 5 FINDINGS – PERFORMANCE: MEASUREMENT, PROBLEMS, RISKS, CRITICAL FACTORS, FAILURE & SUCCESS

Introduction

The aim of this research is to gain an in-depth understanding of the performance of strategic alliances in the energy sector by drawing on an in-depth qualitative study of the perspectives of those involved. I explored the interviewees' opinions on performance measurement, problems, risks, critical factors, failure and success. This chapter will present these findings, beginning with measurement and then moving on to problems, critical factors, risks, failure and success. Performance is the third element of the holistic process model as presented in the discussion chapter. Its sub-elements are: problems, critical factors, risks, failure and success.

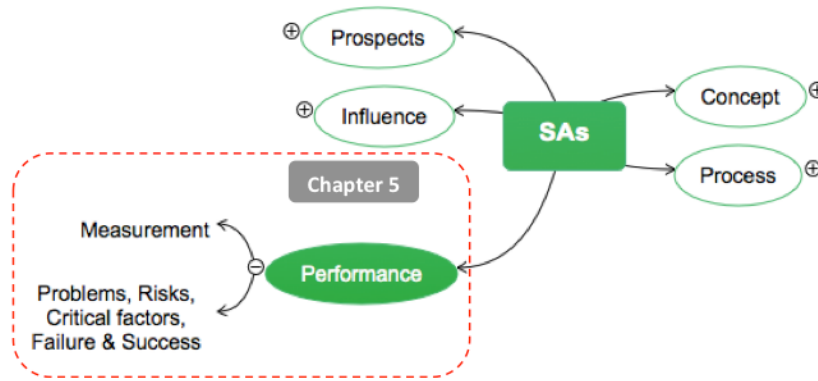
The following questions were posed in Chapter 3 'Methodology and Methods':

- RQ1: How and why have strategic alliances been developed in the energy sector?
- RQ2: How and why do strategic alliances succeed or fail?
- RQ3: Why do firms engage in strategic alliances despite low success rates?
- RQ4: How can we create more effective strategic alliances in the energy sector?

These findings were used to inform the study's research questions (Goodson 2013). I have sought to assist an understanding of the narrative by presenting the findings using tables and diagrams. The format of each section is as follows: Firstly, I have presented a narrative of interviewee's quotations. Secondly, where a table is presented it contains 3 columns entitled 'Key themes', 'Quotation' and 'RQ' (Research Question). 'Key themes' consist of relevant ideas from the 'Quotation' and assist the narrative. The participants' quotations are connected to the research question that they inform, as specified in the column 'RQ'. In sections where tables are not employed, the relevant research question is identified in brackets. Tables are cross-referenced with the relevant subsection of the literature; this is specified in the title of the table as 'LR'. The quotations are verbatim except where minimal editing was required to preserve confidentiality. Diagrams are presented in the sections and subsections in two places: those at the beginning illustrate key themes while the diagrams at the end condense key findings.

The following diagram highlights the sections presented in this chapter as related to performance.

Figure 5-1 Structure of Chapter 5



Measurement of Performance in Strategic Alliances

Interviewees were asked about their perceptions of performance measurement in strategic alliances. The data from these interviews is organised under inputs, considerations, metrics and assessment, as illustrated by the following diagram. Some of the measurement data is interconnected with the categories that emerged from the findings in the next section (Problems, Risks, Critical Factors, Failure and Success). This is interesting as they complement, confirm or strengthen some of these findings.

Figure 5-2.- Measurement of performance



Inputs for measuring performance (RQ1,2,4)

Some interviewees raised the issue of inputs when measuring performance. Their basic argument was that the objectives of strategic alliances should include the process by which

performance will be measured. Performance measurement is peculiar to each alliance and a clear understanding of the objectives made measuring success easier through the establishment of a baseline. They further contended that ambitions or motives could differ among partners. A performance matrix could be aligned to particular goals, and metrics should feed back the strategic alignment. The following table of quotations illustrates these points:

Table 5-1.- Inputs for performance (LR: The Measurement of Performance)

Key themes	Quotation	RQ
Strategic objectives	<i>Well, most people, I think, should have strategic objectives of what they're trying to do. It might be even before they get into the alliance... (Interviewee 8)</i>	1
Objectives as a base line	<i>It depends on what the objective [is] ..., why are you going into... the strategic alliance in the first place. ... If you can answer that question then you have a clear understanding... the measurement of success becomes a lot easier because you start to establish a baseline. (Interviewee 3)</i>	1
Specific to strategic ambition of each partner. Metrics feed back to strategic alignment	<i>It's very specific to the strategic ambition of the particular partner... it's a tricky topic because sometimes their... particular ambitions for an initiative can be different...if the alliance is set up to access a market then the performance matrix really have to be aligned with... achieving that particular goal... they still need some kind of concrete way to make sure that they're measuring that, so that feeds back to the strategic alignment between the two. (Interviewee 5)</i>	1

These quotations show a connection between the concepts of strategic alliances as presented in the previous chapter, where the revision of the objectives influences the kind of metrics to consider. This can be seen as part of a process.

Considerations on measuring performance (RQ1-4)

Some Performance Measurement considerations in strategic alliances emerged from these interviewees' accounts. One issue raised was the difficulty in measuring performance, especially for certain alliances such as technology, marketing or product development. It was suggested that the consideration of softer issues, for example cultural issues, is critical to performance and success. Lack of clarity around objectives may result in issues, such as the influence of stakeholders in setting the metrics for performance. It was suggested that the value of the strategic alliance depends on partners' perceptions and the metaphor of marriage was used to explain this. The following table of quotations illustrates these

considerations:

Table 5-2.- Considerations on measuring performance (LR: The Measurement of Performance)

Key themes	Quotation	RQ
Difficult to measure performance	<i>It gets harder to measure things like technology alliances or marketing alliances or dealing with product development alliances just because the measures aren't as definitive as sales or profit or growth. (Interviewee 8)</i>	1
Softer issues are critical for performance and success, the cultural issues	<i>From my experience doing these things for twenty or twenty five years. Ultimately it was the softer aspects of the cultural side of the process, that was most underestimated in the development of a strategic alliance. And was most critical and ultimate success by it. If you look at many of the discussions, many of the research around strategic alliances the hard issues are very much there. Intellectual property, the finances, the regulatory framework, the legal framework. They've recovered very well. Typically it's the softer issues. The cultural issues around underpinning the performance which are not brought out to the degree which I consider to be of importance... that's an area I would probably consider to be more important now than I ever would have done when I started on this journey. (Interviewee 12)</i>	2,4
Issues: lack of clarity around objectives	<i>And the MOU is just an agreement to agree, and you start without being clear on what's the objective, without being clear on what's the role of the parties, without being clear of what you want to achieve, without being clear on the profitability, then the next step, that is whatever agreement you end up signing, will probably have the same lack of clarity.</i> <i>And when you're getting to the actual execution, then you won't have a way to measure.</i> <i>So it will become subjective... and in that subjectivity you will always have issues with your partner by default. So if you don't have a way to objectively evaluate performance... ..then that's when the difficulty starts. (Interviewee 15)</i>	1,2
Consider stakeholders preferences and needs	<i>You've got a relative unknown, you don't know how this thing is going to work. Don't know where the pressure is going to come from, to deliver this. So you overcome that by having an extensive set of measurement, matrix, which are in place, around the business itself. Very often if you've gone to the markets to finance an alliance of some kind, of course the banks and investors will have governance, they'll have their own issues to be looking at. They'll be assessing the performance from their own analytical perspective and that feeds back into share price so on... are the stakeholders,</i>	1,4

	<i>or shareholders, happy for the alliance to be holding together?... (Interviewee 12)</i>	
Partners' perception and value, like marriage	<i>It's all about pace and whether or not the partners thought the process then was of any value. It's like a marriage, if you ask someone in a marriage if they think it went well, they will know without any sort of... extras. (Interviewee 2)</i>	1,3

The above quotations highlight the difficulty in performance measurement, the importance of considering softer issues and the necessity to take stakeholders perceptions into account. This requires a more holistic framework beyond the conventional process for strategic alliances.

Metrics for performance (RQ1,2,4)

A majority of interviewees highlighted the diversity of metrics utilised to assess performance and commented on ways this can be measured. Metrics are based on the objective of each strategic alliance; a system or matrix can be developed with hard and soft metrics. Different measures can be monitored, such as: market share, profitability, operating profit, cash flow, duration, health and safety issues. It seems that several variables are measured in order to monitor different aspects of performance. Most of the measurement points to objectives or hard metrics; however, some subjective or soft metrics were also mentioned. These included the health of the strategic alliance in terms of the performance of the Board, adaptability to change and the well-being of personnel involved in the alliance. The following table illustrates these findings:

Table 5-3- Metrics for performance (LR: The Measurement of Performance)

Key themes	Quotation	RQ
A system of hard and soft metrics, metrics depend on the alliance	<i>A system that allows you to look at the various variables that make up the venture, and it tells you if you are making money, or you are gaining knowledge or so on... depending on the joint venture, the success is if you are making money and you are still an active participant. (Interviewee 3)</i>	1,4
Agreement on a set of matrices with partner	<i>Well there's has to be clear channels of communication between the companies that... and there has to be a set of matrix... that so far as the performance of the alliance that both firms can agree on, that they can both interpret together so that they both kind of understand where they are. (Interviewee 5)</i>	1,4

Financial performance (operating profit cash generation) but depends on the alliance	<i>Obviously the financial performance... It depends on what you are... addressing with this particular alliance. I don't think it's one metric for everything... the metrics depend on the objective of the alliance... So again, you have different kinds of metrics. If your alliance is to actually address... pure financial metrics, then it's actually... OP, operating profit, cash generation... (Interviewee 14)</i>	1,4
Profitability and market metrics. Focus of attention profitability	<i>It all comes down to profitability and the business successes that you are achieving... at the end of the day, I would boil it down to financial figures, to quantitative figures. As I said, like market shares, for example... and then you should see really that your market share is increasing and that, for yourself, the bottom line is also improving. (Interviewee 4)</i>	1,4
Meet objectives. Own norms and criteria, safety record and ethics	<i>Does it meet the objectives? Does the operating unit [meet] your own norm, so safety and other values and so on. So you would tend to put the same criteria that we expect from our own operations, we would expect that from joint venture or strategic alliance operations... The same with ethics in general. (Interviewee 9)</i>	1,4
Standard metrics: financial returns, health and safety issues, market penetration and market share.	<i>Performance measurement is generally going to be, the pretty normal, pretty standard metrics that you use for any performance in the energy sector. So you're going to be looking at your financial returns, your health and safety issues. You're going to be looking at market penetration, market share and so on and so forth. So I think inevitably you monitor the performance of a strategic alliance in quite some detail. Right from the beginning. (Interviewee 12)</i>	1
Criteria for success: achievement of aims, survival, adaptation to circumstances	<i>If you sort of made an inventory of what the criteria for success are, it would probably be... did it achieve its aims and then secondly... how long did it survive for, and... how well did it adapt to different circumstances? (Interviewee 6)</i>	1,2,4
Repetition of the alliance. Different objectives could work best	<i>Something we want to measure as well is, is it a one off alliance? You've only done it once with the company, is it something that can be repeated. And it doesn't have to be the same, in fact alliance's probably work best if you don't have the same strategic objective. (Interviewee 9)</i>	1
Indicators are different, but a common one should be the	<i>So in each case the key performance indicators are different but in each case there is an additional one which is the health of the relationship of your partners and that's something that you need to assess periodically, mainly once a year... that would be a KPI</i>	1,4

health of the relationship (board performance)	<i>– it's a soft KPI because you can't put metrics to it but certainly in the early years of the Company A [Name changed by the author] relationship I would sit down once a year with the Company B [Name changed by the author] Directors and the Manager of the company and say how is the Board working... is it behaving as a Board or are people still representing shareholders. (Interviewee 10)</i>	
Measure success in terms of well-being of personnel involved. The role of the soft side	<p><i>I think to a degree as well, if you were in a strategic alliance, you're looking at the culture you're developing within that alliance. Frankly is it an enjoyable place to be working. It's not an easy place, you don't want an easy place, but you want something which is challenging, gives you opportunities to progress. Have a bit of fun.</i></p> <p><i>And those are secondary issues around sort of well being of your people in the alliance. In terms of how their... whole contribution is playing with the alliance. It can also be very tangible internal assessment of how successful the alliance is going. Clearly if you're having a lot of fun and not hitting the targets, you're not going to be measure as being successful by your parent company. But if you're just hitting the targets and you have a pretty miserable place to work, but ultimately is not a sustainable strategic outcome either. So you need to get the soft side being delivered as well as some of the hard side. (Interviewee 12)</i></p>	4
Measure new innovative initiatives in research & development	<i>So you can measure those numbers of things, the amount of activity happening, under that. Those areas could be, if you wanted to set up, energy criteria development. If you want to do something like that, then some of the measurables could be the number of new innovative initiatives that have come out of the alliances. It could be new spin outs, or could be new ideas, technological ideas of which we're trying to get funding for. And other things in terms of collaborating and in terms of developing a joint research program. (Interviewee 11)</i>	1,4
Expand the network with new alliances	<i>Another thing could be like a social network analysis to see how many new alliances, new partnerships have been developed, in terms of expanding the network. (Interviewee 11)</i>	1,4

These quotations provide details on the metrics for performance. They can be used as a guideline to identify the performance metrics of a strategic alliance. It is useful to note the need for soft metrics.

Assessment of Strategic Alliances (RQ1,2,4)

Several accounts related to the assessment of performance of strategic alliances emerged

from the interview data. There was some evidence of a lack of retrospective analysis and it was suggested that consideration should be given to the way in which capital investment projects are assessed. There was an example of a strategic alliance where joint and periodic assessment was developed through hard metrics. Assessment was suggested as a revision of the achievement of objectives or goals. If objectives were not met, the options were to either reconfigure the alliance or to exit. The following table of quotations illustrates this:

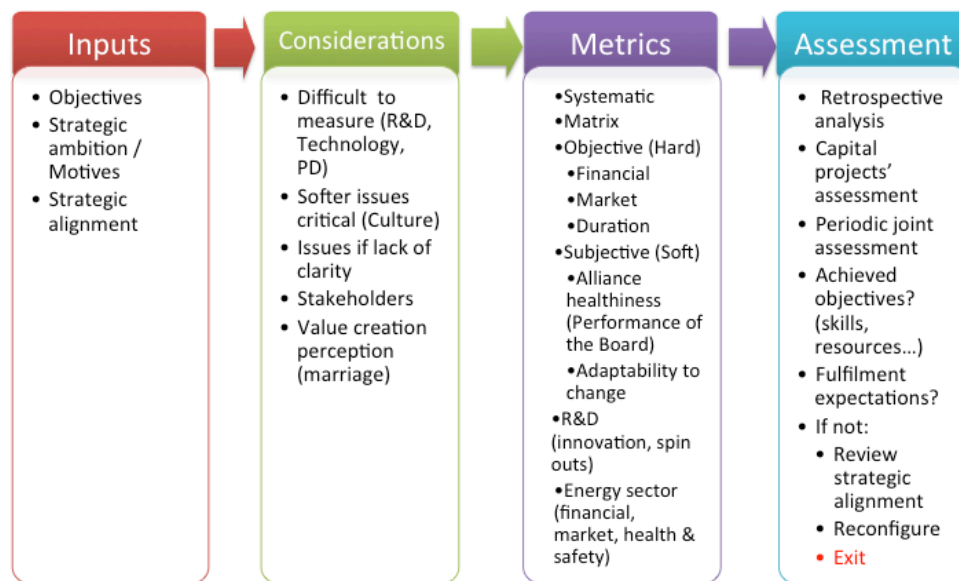
Table 5-4.- Assessment of strategic alliances (LR: The Measurement of Performance)

Key themes	Quotation	RQ
Lack of retrospective analysis	<i>I would say I haven't really seen a great deal of retrospective measurement you know where companies say "okay lets measure how good this has been" (Interviewee 1)</i>	1,2
Assessment of capital projects	<i>So in the same way that some companies, I know certainly when I worked with Company A [Name changed by the author] If they make a capital investment you come back and you do a so called re-appropriation, you know two or three years after the start of the project which is really a learning exercise to say you know we built this project based on these assumptions about the market, these assumptions about the cost of the project, these assumptions about the margins and so on and so forth... (Interviewee 1)</i>	1,2
Joint and periodic assessment and the use of hard metrics	<i>I was a relatively junior guy, but I had responsibility on a month to month basis, or week to week basis, full liaison between Company A and Company B [names changed by author] and we used to meet on a fairly structured basis to look at performance, whether that was cost performance, or a plant that was operational performance or so on... (Interviewee 1)</i>	1,4
Assessment on achieving objectives; if not, either re-configure or exit. Not everything is money	<p><i>The real reason you entering the strategic alliance is to access a skill or a resource you don't have. The primary measure of performance is did you get the access to the skill or resource that you needed... and if you're getting that access then I guess you start to tick the box and say the strategic alliance has achieved its purpose.</i></p> <p><i>If it has achieved your objectives then I guess you tick that and say I've done the right thing. If it hasn't achieved your objectives then clearly you've now got to either re-configure that strategic alliance to achieve your objectives or you've got to find a way of exiting that strategic alliance.</i></p> <p><i>So it's not always a dollar and cents thing... quite often it's just achieving a particular objective which should translate into dollars and cents otherwise you wouldn't be doing it at all. (Interviewee 7)</i></p>	1,2

These quotations highlight the opportunity to implement a joint periodic assessment of the strategic alliance as part of the process of its development. This assessment reviews the objectives of the alliance and implements a decision-making process in order to decide its future.

In summary, the accounts of interviewees highlighted the contextualisation of the alliance in setting performance measurements, understanding the strategic alliance's objectives and needs, and the qualification of performance in terms of achievement. Several variables were measured in order to monitor different aspects of performance; most of the measurement points towards objectives or hard metrics. However, acknowledgement of the relevance of soft elements was also highlighted. Stakeholders' needs and preferences influence the metrics for performance. When an alliance is not working well and there is no room for reconfiguration, an exit often follows. These findings are summarised in the following figure:

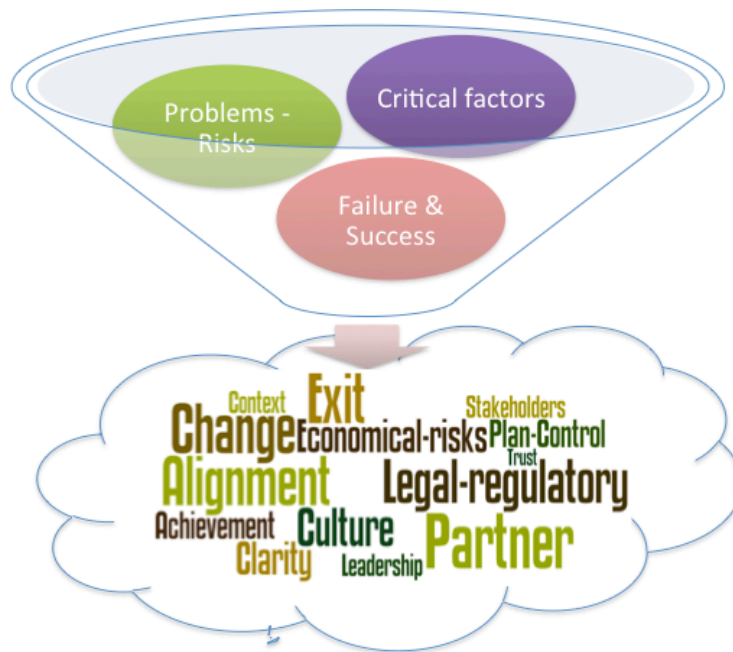
Figure 5-3.- Findings of measurement



Problems, Critical Factors, Risks, Failure and Success of Strategic Alliances

I explored the opinions of interviewees related to the performance of strategic alliances by asking them about their experience with relation to problems, critical factors, risks, failure and success. Fourteen categories emerged from the set of interviewees' accounts. These are: Partner, Alignment, Change, Legal-Regulatory, Culture, Exit, Clarity, Economic risks, Plan & Control, Achievement, Stakeholders, Trust, Context, and Leadership. The following figure was developed to represent the analysis process:

Figure 5-4.- Process of analysis, problems, critical factors, risks, failure and success



Categories were organised according to the frequency with which interviewees referred to them. The same process was followed within the categories to organise the emergent subcategories. The categories are depicted in a word cloud where the size of the category accords to its frequency. Some relationships were identified among the categories. From the 14 categories that emerged, I selected seven according to their frequency, then analysed the remaining categories and selected a further three due to their strong relationship with the initial seven. This chapter presents findings for ten categories that were selected according to frequency and relationship. Among them are: Partner, Alignment, Change, Legal-Regulatory, Culture, Exit, Clarity, Stakeholders, Trust, and Leadership.

Partner (RQ1-4)

The most common theme that emerged from the data was the influence of the partner in the performance of strategic alliances. A large majority of interviewees referred to partner selection, their capabilities from a technical and financial perspective, the issues related to vested interest, the benefits and complexity in partnering and the desired mind-set when partnering.

Partner selection (RQ1-4)

The majority of interviewees highlighted the implications of partner selection in the performance of strategic alliances. They pointed out that partner selection is critical to success and included the need to spend time in selecting a partner and in understanding needs in order to identify potential problems. Elements to take into consideration when partnering included culture, financial strengths, the right technology, approach to risk and experience in strategic alliances. The negative influence of an aggressive attitude should also be considered. The relevance of the partner's contribution in achieving objectives was highlighted, as well as the ability to work together to overcome challenges. When the chosen partnership did not have a positive result, there was a significant opportunity cost of searching for a more effective partner. This suggested that the development of a deep risk-analysis would be valuable in order to balance risk and opportunity. Therefore, if the relationship with the partner did not successfully develop, there would be fewer issues experienced with exiting. The following table of quotations illustrate this:

Table 5-5.- Partner selection (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Critical to success to spend time so as to be confident in the selection of a partner	<i>There was a lot of time on both sides spent understanding whether they were the right partner, to the critical success. (Interviewee 10)</i>	2,4
Understand sources of needs to prevent problems	<i>The requirement of any partner can be a tricky thing because you know it's one thing if they need access to something in a good sense you can kind of create a code of conduct and you can create a strong bond between the two companies. But on the bad side you know you may find that the company you're trying to partner with has a need but that's...because they're in bad shape and they have a broken strategic process and there are other problems....</i>	2,3

	<i>they're more needy that one would suspect and that can create... an underlying problem that would lead to the alliance... falling apart or being less effective than it should be. (Interviewee 5)</i>	
Right partner a critical factor, some characteristics: culture, financial strengths, technology approach to risk	<i>It's finding the person that has the right culture, and the right... financial strengths, the right technology..., the right approach to risk. (Interviewee 13)</i>	2,4
Experience and record in alliances a better partner	<i>If the party has done a lot of alliances, they tend to be a better partner... It's when you get somebody that... hasn't done it a lot or has only done it two or three times and it's always failed, that should be a big warning sign. (Interviewee 8)</i>	2,4
Aggressiveness can breakdown the relationship.	<i>Maybe some people are, some organisations are too aggressive in terms of Strategic alliance. Strategic alliance's go ahead quite often, mergers and acquisitions and so on are quite aggressive... So like a bullying approach to it. So it is a Strategic alliance but it's not done on the basis of willingness or consent. It's done because out of economic necessity or competition. And those things create a lot of bad will and a lot of stress and strain and upset. And quite often leads to a breakdown of the organisational cohesion. (Interviewee 11)</i>	1,2,3
Contribution to the objective and fit (culture, finance and ethics)	<i>The partner in a strategic alliance [has] got to be bringing something to the table, that's number one. If they're not bringing something to the table they shouldn't be involved in the first place, because they're not meeting the needs you have. Secondly they have to be someone you can work with. And work with in the wider sense. So that's culturally, financially, ethically, so on and so forth. (Interviewee 12)</i>	2,4
Risk: wrong partner – opportunity of a better partner – look at opportunities. Conduct a deep risk analysis. It requires ground work before partnering	<p><i>Not achieving the objective. The risk of ending on with the wrong partner; at risk of... alienating yourself from a better partner that you probably didn't know about. There's risk or exposure to ... access to your business in terms of intellectual property, or how you run things. There's risk of ... bribery or corruption.</i></p> <p><i>I don't like just to look at risk. What are the opportunities?... And it goes back to the first question of why do you do it? So it's like everything, you need to balance risk and opportunity...</i></p> <p><i>And back... to the example, you know, the risks are not generic, you need to do your homework and be clear on... the risks that are specific to the joint venture, and be able to identify the risk...</i></p>	2,3,4

	<i>and put measures in place that are jointly owned...to be able to...to mitigate it. Some of them are specific to the partners, some of them are specific to locations, some of them are specific to the business, but if you are able to properly say, you know, "What's the probability? What's the consequence? How can you manage it?" Then you're quickly able to say, "You know what, there are seven things that could bring this thing to a complete belly-up situation...so let's make sure that we manage these seven properly." So...we're back to what we were just talking about, about the amount of pre-work...that you do before getting into bed with someone. (Interviewee 15)</i>	
Wrong partner – deal with exit	<i>I would say partner and then an agreement that doesn't deal with the circumstances that you find yourself in and you end up – you've fallen out with your partner and you go to the agreement and the agreement isn't what you said it is because it didn't deal with exit properly. (Interviewee 8)</i>	2,4

The above quotations confirm that partner selection is critical to success. There is therefore a need to carefully analyse partners. This also connects to the importance of understanding the needs and motives of the parties involved, as presented in chapter four.

Partner's technical and financial capabilities (RQ1-4)

Some interviewees interpreted the partner's capabilities in financial and technical terms as a source for problems and risks. If the partner does not have the skills or resources that are needed, they will not be able to deliver. It was therefore suggested that it was important to spend sufficient time in assessing the capabilities of a potential partner. Issues can arise when the partner lacks the financial resources to honour his commitments. When this occurs, there is a risk of default and the potential loss of the hydrocarbon license. Thus, the weak financial health of a partner may require the commitment of further resources from the other partner. The following table of quotations illustrate these findings well:

Table 5-6: Partner's capabilities (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Not delivering skills or resources. The issue is not spending time to assess capabilities	<i>The main risk... that the person can't deliver the skills or the resource that you actually thought they would deliver. I think that's probably the biggest risk. Or if you look at it from your own side it's the risk that you don't understand the resource or skill that you actually want or the resource and skill that the person can... actually deliver. So I think that's where I see the biggest issue on that one is... not spending enough time getting comfortable with what you're asking for they can deliver... (Interviewee 7)</i>	2,3,4
Risk of default and losing the license	<i>There can also be issues about the risk that if you default and fail to develop this resource the way you are supposed to, that in certain circumstances the government may have the right to come in and say, "Well, you're not doing what you committed to do, we're going to take away your license." So it's a three-way conversation often, that involves the partners and the state, in trying to find the best way forward to make sure that the project... can continue. And then it's a four-way conversation, because you're also having to talk to the financiers of the party in trouble, who are going – you know, considering whether to cut their losses, and potentially exercise their rights of security over that party. And you're going, "Please don't do that, because if you put this party into insolvency, it's going to trigger all sorts of consequences for us". (Interviewee 13)</i>	2
Financial health or more resources needed	<i>For instance, you may be entitled in a joint venture, to effectively takeover your partner's share of the venture. But then you have to fund it and you may not have the funds yourself... So sometimes, parties are forced into nursing along a quite sick partner in the hope that their financial situation will allow them to continue to fund their share of development, because the alternative is worse. (Interviewee 13)</i>	2
Healthy relationship amongst partners to face financial issues	<i>And also keep momentum, so to keep that relationship good under stresses and strain and budget problems. So quite often if you've got an alliance and you're working together, you might run out of funds, but still have to deliver. Because if you don't have a good relationship with your strategic alliance then... you might not be able to convince them to take that loss, to share that loss, and you might have to take the whole losses out. (Interviewee 11)</i>	1,2

The quotations above highlight that time should be invested in considering the relevance and consequences of choosing a partner. The lack of a partner's capability could have severe consequences at the upstream level in the energy industry, for example losing the license to operate.

Issues related with vested interests (RQ2,3,4)

Accounts from some interviewees highlighted issues related to vested interest amongst partners. In some cases, there could be inordinate gains in the execution of deals; agreements might be pursued which may not be in the owner's best interests. Difficulties with vested interest could be on individual or organisational levels if their behaviour was not congruent with the agreement. Openness and communication were highlighted as critical, along with the early identification of problems and the need to address these immediately they arose. The following table of quotations illustrate this:

Table 5-7.- Vested interests (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Desperation to make deals happen.	<i>Common failings that people... think about because they desperately want to find some synergy to make a deal happen.</i> <i>When people get into developing an alliance particularly in a sort of private equity type of thing; there is a lot of vested interest to make your deal happen... emotionally as well as financially, I mean some people start to gain financially if things happen. But there is also once you, most people I believe... want to make things, you know once you have got this concept and once you have got some level of agreement then you want to make this thing happen. (Interviewee 1)</i>	2,3
Problems arise at the individual or organisational level Mismatch between agreements and behaviour	<i>I think quite a lot of the times there are problems with vested interests... Although the organisations agree to the alliance or partnership, the purpose of what it is for. They may not behave on a day-to-day basis, in accordance with that agreement... But some individuals or organisations might be in that alliance to see if they can get something out of it for themselves as well, and maybe focusing more on that, than the greater benefit for the whole alliance. (Interviewee 11)</i>	2,3
Prescription: Openness & communication. Early identification of problems and addressing them	<i>When people are putting together an alliance, they're on their best behaviour and they're showing their best face to the other party, and maybe they do not always admit to weaknesses. And then once the alliance goes forward then the truth begins to emerge and relationships can begin to break down. So I think openness and very, very good communication at the early stage is probably critical in making sure that... if there are problems that they are identified early and addressed before they get a chance to develop. (Interviewee 13)</i>	2,4

These quotations show that when a process is hurried, issues can arise. It is advisable to identify the hidden motives of the parties, segregating and comparing the interests of the organisations and the interests of the individuals participating in the process of a strategic alliance.

Benefits of partnering (RQ1,2,3)

Some interviewees highlighted the benefits of partnering. The perception is that the value created of doing business together is greater than doing it alone. Partnering could allow access to a country or market, thus overcoming cultural or technological deficiencies. In these cases, partnership offered a way to achieve strategic objectives more quickly due to the synergies created. It was also highlighted as a way to develop business by sharing the cost, despite the risk of high levels of tension in the relationship, referred to as having a 'Highlands games week'. People could find strategic alliances enjoyable, but they could distract managers from core operations. This is illustrated in the following table of quotations:

Table 5-8.- The benefits of partnering (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Partnerships increase the value of a business	<p><i>You want to see the success but the business success associated with it. If two parties come together, they should together be more successful than the individual party...</i></p> <p><i>The business result from such an alliance has to be bigger, high profitability, bigger market share than before.</i></p> <p><i>The logic of a successful strategic alliance is that fifty percent of the profit, fifty percent of the profit from a strategic alliance should at the end be more than the hundred percent of the profits you would make if you had not entered into the strategic alliance and do your business on your own... (Interviewee 4)</i></p>	1,2
It allows to access a country or markets, overcoming a deficiency in cultural or technological terms	<p><i>Sometimes a strategic alliance is a real enabler of... success because... you are lacking.... a regional and cultural specific know how. You cannot even enter into a country without an alliance partner or the technology side is, for example, a catalyst technology. You [own] a process platform, maybe with some standard material, standard catalysts or standard products and you form a strategic alliance with a partner with this added type of, more differentiated product available and accessible. (Interviewee 4)</i></p>	1,2,3

A way to achieve strategic objectives more quickly	<i>I think that both parties get their strategic objectives met and I think my second one would be that they met those objectives faster because they partnered with somebody... That's what you do and that's why people do them all the time. (Interviewee 8)</i>	1,2
Develop business, share cost (despite high tensions like the 'Highland Games')	<i>It's a little bit like the Highland Games every week you have your round of jousting, stone throwing, caber rattling, whatever you like and all you're building in is an immense amount of tension and an immense amount of... time to try and engage in relationships... continued difference, continual disputes but it doesn't mean that it's not profitable.</i> <i>The root of the difference is that each one feels they are inhibited as to how they would like to develop part of the business that comes out of the joint venture. And they would love to go it alone and develop it alone. But the cost of going it alone is inhibitive... (Interviewee 7)</i>	1,2,3
Strategic alliances are fun for some people, but could distract a lot from core operations	<i>In terms of management, if you're not contributing the whole company, alliances can be very time consuming. And can be that your management is less focused on other parts of your business. And particularly at various stages of the alliance, they're very distracting, often quite fun to be involved in. So you find that, compared to the mundane of running a business, being involved in alliances is quite attractive for people. So it can become a significant distraction from running the main part of the business. (Interviewee 12)</i>	1,3

These quotations highlight the benefit of partnering. Although involvement in an alliance can be attractive, they demand a lot of attention from the parent organisations. This should be considered when deciding how to configure the number of alliances within a portfolio.

The complexity of partnering (RQ1,2,4)

Some interviewees highlighted the complexity of partnering. Partnering was perceived as something complex and the metaphor of marriage was used in order to suggest that there was no simple recipe for success. There was also the perception that, in managing a business, partnership was more difficult than doing it alone. The complexity of strategic alliances increases as the number of partners increase due the challenge of cohesion and involvement among partners. This is illustrated in the following table of quotations:

Table 5-9.- The complexity of partnering (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
More difficult than managing alone. It is like marriage, there is no recipe for success and difficult to identify success factors	<i>It is like a marriage. There's no recipe...on whether you have a happy marriage or not...it really depends on are you getting married for the right reasons? Are you getting married to the right girl? And are you putting the effort into making the marriage work? Because when there's a problem, there's not a problem just on one side, right? Typically it's a problem on both sides. So...I don't think it's as simple as what are the things that will make it work or not... make sure that you get into a strategic alliance for the right reasons. Make sure that you... choose your partner well. Make sure that... you put the effort into managing the relationship, because, for sure, it will be far, far more difficult than managing yourself. If you do all that, it will probably be fine. If your party does that...it will be fine. (Interviewee 15)</i>	1,2,4
The more partners the more complex	<i>One is the less partners, the better because you cannot do a thing of strategic alliances, which go beyond two partners, which is rather complicated because then you have rather complex management, ...challenges to keep all the partners, ...abreast of developments and to keep them all involved. So, the less partners you have, the better, so if you have two partners, it's good. (Interviewee 4)</i>	2,4

The above quotations demonstrate the issues around partnering. It encourages developing a careful process of the alternatives available for an organisation when making a decision. This aspect is linked with the process mentioned in the previous chapter under business options.

Win-win mind-set in partnering (RQ2,4)

Only one interviewee commented on the need to have a win-win mind-set for success. He additionally mentioned the need to deal with partners as colleagues rather than opponents. This quotation is of particular interest because it was identified as a success factor by the interviewee:

It's got to be a win, win situation in my view. I think I was successful in doing a lot of these because I never viewed it as a, you know a negotiation where that was a zero sum game.

So sometimes you would enter into an agreement with a company that thought well they are going to get your assets, they are going to take all your money as well, and because you are at a disadvantage they are going to rape you. That never works...

So it's always trying to get your opponent to see that he is not your opponent he is

your partner... And being willing to compromise... (Interviewee 3)

The quotation above shows the importance of long term thinking when partnering, otherwise the strategic alliance will not last.

The following diagram summarises the findings of the most common category - 'partner'.

Figure 5-5.- Summary of findings of partner



The diagram above represents the 6 subcategories that emerged from the findings on Partners. The benefits assist helping us to understand why organisations enter into strategic alliances. Complexity offered two perceptions of particular interest. On the one hand is the view that partnering is more complex than doing it alone and, on the other, that the more partners the more complex the strategic alliance. The benefits of partnering by developing businesses and sharing costs, despite creating high tension and conflict, is referred to as 'highland games week'.

Alignment (RQ1-4)

The second most common theme that emerged from the data was the influence of alignment in the performance of strategic alliances. Differing interests were a negative influence, along with objectives, expectations, drivers, and approach, and the perception of the connection between alignment and success.

Differences in interests, objectives and expectations (RQ1-4)

Some interviewees highlighted issues caused by misalignment between partners due to differences in interests, objectives and expectations. Cases of a refinery and an aromatics plant illustrated the issues when the interests of one party went beyond the boundaries of the alliance and the resulting conflict could be with other partners or shareholders. It was suggested that it was necessary to spend time in agreeing the objective of the alliance in order to prevent such issues. Lack of alignment could emanate from different expectations due to a disparity in size or financial resources between partners. Different approaches and appetite for risk can drive decisions between partners in different directions. For example, conflict can arise with regard to an oilfield due to a different approach towards either continuing operations or decommissioning. Disagreements over expected levels of return, funding or operational matters were also highlighted. Having a different view of the balance of rewards was also cited as a potential source of conflict. The following table with quotations illustrate this:

Table 5-10.- Difference in interest, objectives, priorities and expectations (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Different Interests. The case of a refinery and an aromatics plant	<p><i>There was a flaw with respect to I would say the alignment of interests, which fed through in to some very big issues from the emotional side.</i></p> <p><i>The refinery was a hundred per cent owned by Company A [name changed by Author], whereas the Aromatics plant was fifty per cent Company B [name changed by Author], fifty percent, Company A. And that led to unnatural tension in the interface between the two, because if you were a Company A guy you would say okay every dollar that I can keep on my side of the fence is a dollar for me... (Interviewee 1)</i></p>	1,2
Different interests and conflict with other business of shareholders or partners	<p><i>Now, you've formed a strategic alliance because both parties are receiving the respective technical part of the other party and only if you put it together, it makes business sense for them to pursue that opportunity so they're doing this, and they're just teaming in the strategic alliance. It's creating new business opportunities and might, for example, get in conflict with the business of one of its shareholders or partners, while... the other's would be supportive of a business proposition and then, that business very often has a conflict of interest or a discussion with the interest of the participating parties in the remaining business is very often a root cause for trouble. (Interviewee 4)</i></p>	1,2

<p>Different Objectives and priority Prescription: spend time to set objectives</p>	<p><i>The first one I would say is people [hasn't] gone through the strategic objectives together.</i></p> <p><i>I strongly suggest that you spend a lot of time with those partners figuring out what you're both trying to do before you enter into the partnership.</i></p> <p><i>One of the main issues as well is that the two partners don't have the same strategic objectives. They don't have the same priority...</i></p> <p><i>You haven't talked about... the objectives enough. You're not really aligned on what you're trying to do. (Interviewee 8)</i></p>	2,3,4
<p>When expectations are different, end the alliance as soon as possible</p>	<p><i>The shortest strategic alliance I have ever been involved...the problem... everyone has certain expectations, all the documentation when the dust had cleared one of the parties came back and said well that didn't achieve what I wanted it to achieve. And this is what I expected and having thought about it... And the other party said well that's not what we were anticipating you getting anyway. So rather than fight about it and before they committed anything to it they just decided to fold it. (Interviewee 7)</i></p>	2
<p>Different expectations due to different sizes and financial resources</p>	<p><i>A lack of alignment as to what the joint venture should be trying to achieve. And often, that lack of alignment is because one party wants to spend a lot of money and the other party doesn't... and particularly where you have... parties of very different sizes and financial resources that can be a real stress... that can often be solved by the party that's lacking in resources selling out to a party that does have resources, if there's time... so financial stresses have been the main cause of difficulties that I've encountered. (Interviewee 13)</i></p>	2
<p>Difference on approach and appetite for risk. A case of decommissioning. The North Sea would be under stress, because multinational operator would assess opportunities globally, and</p>	<p><i>I had an example just the other day of a difference of approach, where one party felt that it was time to decommission an oil field and the other party wanted to carry on, and thought there were things that could be done that could prolong the life of the oil field. ... so that's just a straightforward difference of – maybe different – different risk appetite, in that one party was prepared to continue for a level of return, which the other party considered inadequate. And I guess that's something that's going to happen more and more in the North Sea, where... some of the larger multinational operators have a competition for their capital. Where in other parts of the world they can see very high level of return from... investment in – say, in West Africa or in the Gulf of Mexico. And they're being told that the alternative is they can</i></p>	2

invest in more attractive areas. This could derive in issues for strategic alliances, there is a need to align expectations of return.	<i>invest their money in the North Sea, where costs are very high and levels of recovery are relatively low, and they'll therefore get a much lower level of – of return. Now, there may be smaller companies for whom that lower level of return is perfectly adequate... so... clarity as to what level of return you would be prepared to accept and making sure that there's a degree of alignment over that, is probably pretty – pretty important (Interviewee 13)</i>	
Different perception of rewards can result in problems	<i>It kind of takes you back to the main analogy about a marriage. But you know I think if one side is perceiving that they're... doing all the work and getting none of the rewards... that creates a fundamental problem that you need to address before it ever happens. (Interviewee 5)</i>	2

These quotations show how differences can affect the performance of strategic alliances and highlight the need to align expectations. This confirms the need to be scrupulous and spend time creating a common understanding of expectations and objectives among partners in when developing a strategic alliance.

Alignment and success (RQ2,4)

Accounts from some interviewees highlighted alignment as a success factor. In order to achieve the outcome, it is vital to work together. This represents a process of continuous negotiation and the skills of actors in the strategic alliance are critical in achieving success. The following table of quotations illustrates this:

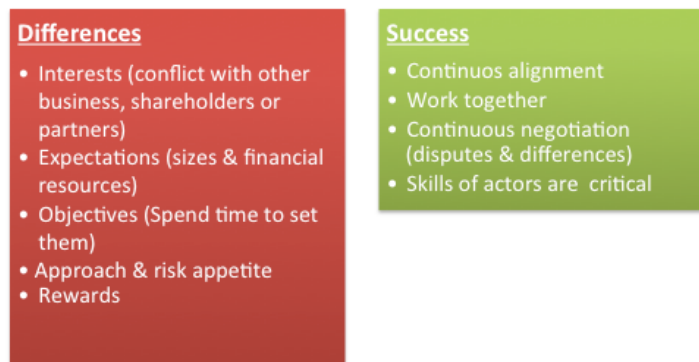
Table 5-11.- Alignment and success (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Success	<i>I think success is that alignment of interest... (Interviewee 10)</i>	2,4
Continuous alignment of the strategic ambition	<i>Always start whatever the strategic ambition was of a particular partner... if access of a particular market... to the technology.... to... raw materials that you know provide the sustainable advantage for your facility... whatever the strategic need is... your performance along that... relative to the costs that ... the undertaking have... that is really the major determinant of success. If ... one way or another the alliance is satisfying that need and is doing it better than your foregone alternative.... then you have it. And all that comes down to is making sure you're continually getting alignment and its working and its fitting. You know it fits for you and... that it's also workable for your partner. (Interviewee 5)</i>	4
Success: Work together to	<i>I think it's really difficult to identify what makes for a success... particularly when you come to a big organisation that actually this</i>	2,4

achieve the outcome. It is a continuous negotiation of disputes and differences (actors' skills are critical)	<p><i>strategic alliance isn't you being the dominant partner this is about working together to achieve the outcome that you want the reason you're there and they want the reason the they're there. I think that probably leads into the saying I have heard is that a strategic alliance is a negotiation continuum</i></p> <p><i>People had to have very good negotiation skills to make a strategic alliances work... if they allowed a deadlock to develop... then the risk of some form of breakdown was very, very high. So it was about being able to see where disputes and differences would arise and being able to negotiate through those disputes and differences and not let them become deadlocks in their own selves. (Interviewee 7)</i></p>	
---	---	--

Findings are summarised in the following figure:

Figure 5-6.- Summary of findings of alignment



The diagram above represents the two subcategories that emerged in reference to alignment. Difference in interests, expectations and objectives could cause tensions and difficulties. Continuous alignment was perceived as important in achieving success, along with the skills of the actors in the strategic alliance.

Change (RQ2,3,4)

Another of the common secondary themes which emerged from a majority of interviewees was the influence of change in the performance of strategic alliances. Four categories of change were identified: (1) change in expectations, interests and objectives, (2) change and the perception of failure, (3) change and markets and (4) change and the need for endorsement by executives.

Change in expectations, interest and objectives (RQ2,4)

Accounts from some interviewees pointed out that expectations, objectives and priorities change, therefore there is a need to develop flexible agreements and plan for a possible exit as part of the management process. The terms of ‘divorce’ should be agreed in advance. A Board drawn from both organisations was implemented to keep track of and communicate change at the parent and alliance levels, requiring transparent communication. The response to change may differ amongst partners and their respective reactions could depend on the options available to each party. A lack of possible options acted as constraint as one partner may become subject to the behaviour of the other. It was suggested that the source of a change of interest should be analysed and understood in order to help to fix problems and that mediation be included as a tool to accommodate change. This is illustrated in the following table of quotations:

Table 5-12.- Change in expectations, interests and objectives (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Expectations change Prescription: flexible documentation and plan for exit	<p><i>I think the critical thing is to accept that expectation will change, that the documentation needs to be flexible enough to meet those change in expectations. And a point will be reached when either one or more of the parties will say I've got what I want or I'm not getting what I want I want to exit. So there needs to be built into the strategic alliance a recognition that things will change over time.... I have seen strategic alliances structured so that there can't be an exit. Of course there can always be an exit but financially it's, it's always going to be unattractive for there to be an exit.</i></p> <p><i>But that joint venture was put together a long time went into the structure of the joint venture. There was very little time went into how the joint venture was going to be managed and I mean on a day to day basis not just reporting terms... and no time was put into the question of what happens if someone wants to leave. What is exit? (Interviewee 7)</i></p>	2,4
Things always change Prescription: Parents-Board Alliance people transparent communication	<p><i>I think is organizational and that's... how are you going to have both parties monitor, control and direct the alliance once you put it together because there are always going to be things that are going to change and how do you work together well to do that smoothly...</i></p> <p><i>What I found to be very effective is, we put together a board of people at a senior level from both companies who knew what the strategic objectives were and they met with the alliance people</i></p>	1,2,4

	<i>multiple times a year and provided input from their respective corporations as to what might have changed on the corporate side so they can be incorporated into the alliance, and then the alliance people gave the same message to both sides at the same time as to what was going on, and it was very transparent. It was very clear, and organizationally, it's never easy but it was a good way to run things so there were fewer surprises and problems. (Interviewee 8)</i>	
World changes, partners respond different depending on the options available to each party	<p><i>And of course often the world changes. And how the strategic alliance partner wants to respond to those changes can be different to ones own change...</i></p> <p><i>From my experience, where strategic alliance's haven't worked so well, that's the main thing. That either they've got other options as well, and you don't have them so that's one thing. And then the other one is that they're out of time and they just don't deliver. The one party is just happy to sit there and work with its other options. For us it was the main option then you're stuck, you must get out of it. And that is brought about by the world changing our pace from the time you put the strategic alliance together. (Interviewee 9)</i></p>	2
Interest change, different behaviour from expected. Prescription: understand the sources of change to solve the problem	<p><i>I think the main problem is when one party's interests change.</i></p> <p><i>If your interest has changed and you say I don't wanna be in that alliance with that person anymore but I am. How do I gracefully exit without losing value or if you're on the other side you suddenly realise that your partner is behaving differently than you had expected and that's the general fault line. So understanding what the change of interest is might give you the clue as to how to solve the problem which could be the company needs to raise money. So it's gone from being a buyer to a seller. There are lots of things but generally most strategic alliances start off well and hit a block after years two and five. The ones that survive in the long term get through that, whatever it is. (Interviewee 10)</i></p>	2,4
Prescription Mediation as a tool to accommodate change	<i>I am now – I wasn't ten years ago – I always put mediation in as a first – you know, proper mediating – to try and stop it getting legal. Proper mediation from a professional mediator to say is there a way that this can be effectively renegotiated that means that both parties feel they've got what they need. So I would insert – I would now put that into any joint venture agreement. (Interviewee 10)</i>	1,2,4

These show the need to acknowledge change. Strategic alliances can take years to develop, therefore original ideas and expectations change. This has to be taken in consideration and discussed with the partners in order that documentation accommodates change.

Change and perception of failure (RQ2,3)

Some interviewees pointed out that a change in objectives and interests is natural in the cycle of an alliance. Failure could therefore simply be a perception and thus strategic alliances which come to an end were not necessarily failures. This is illustrated in the following table of quotations:

Table 5-13.- Change and perception of failure (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Alliances have a natural end-point which this does not necessarily mean failure	<i>Some – well failure is the wrong word – some – most successful ones reach a natural end point. That's not failure but there comes a point at which one of the partners changes or the business changes to a newer structure but then you can say the same within companies. Businesses come and go but understanding you've got a shareholder agreement and that in ten years' time someone's gonna pick that back up and say how do we use it. (Interviewee 10)</i>	2
Objectives change but this is not failure	<i>And I go into Brazil and discover it's not a very attractive market for my product and I pull out of the alliance, is that a failure? Well, no. I've had my objectives changed, I'm not interested in Brazil anymore, and it wasn't necessarily because you and I failed as partners, it was-, Brazil wasn't the best kind of place for me to sell my product and I wouldn't have known that had I not done the alliance but, you know, things change. (Interviewee 8)</i>	2,3

These quotations challenge the perception of failure. Even when organisations enter a strategic alliance and do not achieve their objectives, the learning process could be of benefit to other alliances.

Change and markets (RQ1-4)

Accounts from some interviewees pointed out that markets change. In the industry, the price of oil could develop differently in various situations. This needs to be taken in consideration when dealing with change. The need for continuous recalibration and adjustment in the relationship among partners was suggested to help deal with changes in the market. The market mechanism reflects change - this explains why some strategic alliances continue despite variations in actual performance. This is illustrated in the following table of quotations:

Table 5-14.- Change and markets

Key themes	Quotation	RQ
Change in markets (oil price), perspectives change. Teams get to know each other and face different circumstances. Prescription: Continuous re-calibration and adjustment, a search for strategic fit	<p><i>One of the things that works is if the two companies in the alliance or more than two. If the companies involved in the alliance if they are continuing to re-calibrate and adjust... so that there continues to be a strategic fit. Then the alliance usually stays pretty healthy.</i></p> <p><i>You've one set of perspective and as you move on and the team partners get to know each other and they have to deal with different circumstances things could change.</i></p> <p><i>I mean in the oil business what I saw... in the last decade when oil prices were twenty dollars a barrel there was a lot of different... alliances and... sharing agreements and applied agreements... and then... oil suddenly becomes a hundred dollars a barrel in a matter of a few years...</i></p> <p><i>So it certainly over the course of time if the partner continues to... identify gaps and ... to work together and make sure that they're finding a way to keep the relationship fair and balanced on both sides. And that takes a lot of commitment and both sides really have to want to make it a priority. (Interviewee 5)</i></p>	1,2,4
Environment change, strategic alliance continues even if it is delivering less value	<p><i>The markets accept the under performance and the back room environment might have changed, and then it effectively goes down as a lesson learned and you've lost some value. It was the case that many strategic alliance organisations stay together for a long, long, a strategic alliance that stays together for a long time, but not delivering the value projected. The market place is sufficient. They're still providing value that is over and above an alternative. The market will continue to support it and it just goes on. (Interviewee 12)</i></p>	3

The quotations above show a contextualisation for the energy industry, particularly in the oil and gas segment where the price of oil plays an important role and could encourage the development of strategic alliances. Considering that strategic alliances can last a long time, it would be useful to visualise the future with the partner and look for a common understanding.

The complexity of change and need for Executive endorsement (RQ2,4)

Only one interviewee highlighted the complexity of change for organisations and the need for endorsement from a senior level to make things work. This view was of particular interest because it highlighted the challenges of change in organisations and its connection with alignment. Being involved in a strategic alliance requires alignment with other

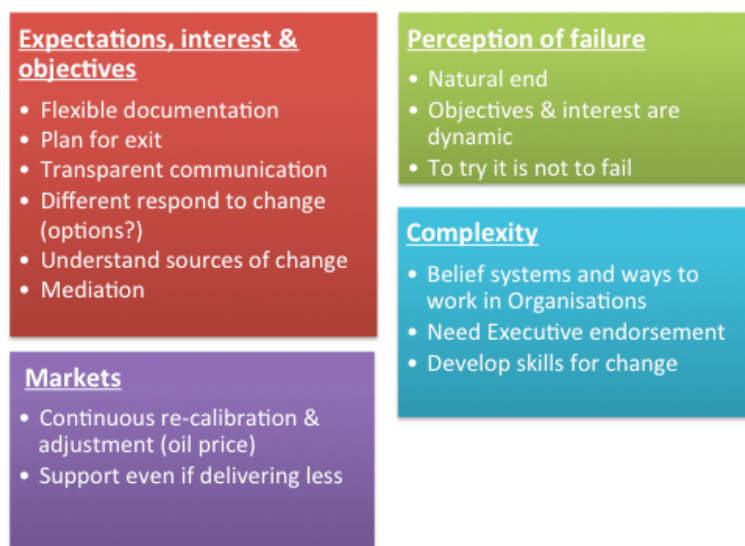
partner(s), but this could be challenging because they all have different processes and systems. The following table of quotations illustrates this:

Table 5-15.- Complexity of change and need for endorsement (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Entering a strategic alliance demands a change in behaviour and alignment with a partner. Change for organisations is difficult	<i>It's maybe a little bit analogous to change... if you want to engage in a strategic alliance to make it work you've got to take part of your business and you're asking it to behave and to, to work in a different way. You're going to say, you, you go off and you align yourself... around this particular area of business with our strategic partners. And I think it – you're sort of saying, you're asking the group that does that to change.</i> <i>Why change in organisations is so difficult, because people have established ways of doing things, they have established processes and... they have established belief systems about what's important, who's important and how, how things should work around them. (Interviewee 6)</i>	2,4
There is a need for endorsement at the executive level	<i>Now if you're going to change those you've got to make it absolutely clear from the... top that you want to do that. So...if strategic alliances are going to work they've got to be bought into at a senior level and they've got to be endorsed by the top of the organisation and not just at the launch day each. The CEO has... not just got to say, "We've got this strategic alliance... it's going to be marvellous, it's going to be very good for both of our companies" and then walk away from it. There's got to be a commitment and from an Executive level that we really believe in this and we're going to do what it takes to make it work. (Interviewee 6)</i>	4
Prescription: invest in developing skills to deal with change	<i>I think expecting there to be problems and actually putting the resource in place... to manage the problems, so to actually invest in things like... behavioural workshops and ...the equivalent of organisational change workshops... and team building processes, I think those things are – it's easy to be cynical about, about those kind of things. But I think doing them well and doing them effectively is, is really important for, for this type of thing, because ... you tend to get... such strong problems where you're bringing together... two different companies' resources. (Interviewee 6)</i>	4

The findings for change are summarised in the following diagram.

Figure 5-7.- Summary of findings of change



The diagram above represents the five subcategories of Change. The need for a continuous re-calibration and adjustment was highlighted, suggesting a connection with alignment. It is complex for organisations to accommodate change which suggests a link with culture.

Exit (RQ1-4)

The issues related to exit and strategies to deal with it were highlighted by the majority of interviewees. Exit strategies could be identified in the contract (similar to a pre-nuptial agreement), but this was not always the case. Enthusiasm to complete the deal sometimes caused this to be overlooked. Exit is likely to be simpler if there is a parent company, but can very difficult when the whole organisation has been committed to the strategic alliance. The agreement should contain provision for termination alongside a conflict resolution mechanism. It was suggested that, when necessary, exit should be speedy. There was an acknowledgement that a strategic alliance had a natural end where it must be exited or renewed. Exit could exist as an alternative to change; if this is complicated, a simple option is for one party to buy out the other. For example, in the North Sea it is not common to have pre-emption rights. The partner then goes through a process of setting up a data room, running an auction and selling to the highest bidder, provided that financial and technical competence is met. This is illustrated in the following table of quotations:

Table 5-16.- Exit issues and strategies (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Exit strategies, excitement to do the deal overlook exit, context of strategic alliance. If a parent company exit is easier. Exit is difficult when everything has been committed	<i>Well in many cases I would hope that the initial contract around the strategic alliance would identify exit strategies. That is not always the case. It can be very easy in the excitement of putting an alliance together to forget that you may actually separate at some point in the future. So having your pre nuptial agreement which identifies what happens when you separate is part of the discussion when you go into it. I think the answer again, it depends on what you've done. If you still have a parent company, so if you put an alliance together where the alliance is part of the company. You have a parent company. Then exiting from the alliance is absolutely somewhat easier in terms of re assimilating the parts. Assuming you've reached some kind of financial agreement. Typically if you're looking at your energy project, then one of the partners will assume the project, in total, or one of the partner will sell out to someone else. And effectively someone might have a new partner to work with. Both of those should be allowed for within the contract. You can do that if you've got a parent company that you can bring your own people back into, and bring the resources back into, from an exit. If you put a strategic alliance which you've burnt your bridges, you've committed your entire organisation into that alliance. Then separating I would say is quite unusual and very messy... (Interviewee 12)</i>	1,3,4
Interest has a 'shelf life', exit gets complex when agreements do not consider it	<i>This is quite some time ago an old gas joint venture. We hadn't properly understood that it probably wasn't a permanent relationship.</i> <i>There came a point when one company was gonna have, you know, – both companies were gonna want a hundred percent of the business or none of it and we didn't properly realise that it had a shelf life and that happened quicker. Company A [name changed by Author] wanted a hundred percent of it quicker and then Company B [name changed by Author] decided they wanted none of it – they were gonna stick at upstream and sell wholesale but the joint venture agreement didn't allow a graceful exit and it took a year of unnecessary angst to end up... (Interviewee 10)</i>	1,2,3
Problems when exit is not considered Prescription: implement exit clauses ('divorce provisions' a	<i>I think one of the things that we learned, certainly I learned, we had no exit clause.</i> <i>When we did it we couldn't talk about the potential of the failure of the alliance, because basically we had no choice. If I were doing that all over again I would have been, I would have put in as much protection as I could, given some numbers, some objectives, some goals... some targets that had to be hit. And if they weren't hit giving us a way to divorce... There were absolute, there was nothing in there that is why it was two years of negotiation... And</i>	1,2,4

prenuptial agreement)	<p><i>they tried to rape us going out.</i></p> <p><i>There was nothing written and today if I was doing a strategic alliance, or doing a joint venture I would put in divorce provisions, almost like a prenuptial agreement.</i></p> <p><i>Yeah, exit clauses I think are essential but you don't always have that option... Because another company if they are, if they are taking you on thinking ultimately we are going to gobble you up... You're not going to agree to that.. (Interviewee 3)</i></p>	
Termination provision & a good conflict resolution mechanism A natural ending or renew it	<p><i>You have to have termination provisions, and the termination provisions will not kick in before a proper deadlocked resolution process... And there has to be also a natural ending... at which you have the option to exit or to renew... and you need to have some good conflict resolution mechanism. (Interviewee 15)</i></p>	4
A successful exit: do it fast	<p><i>I think you do it quickly, in my opinion. I think if you want... to exit in a successful way, it's to actually do it, when you... get the second or the third time that you have issues. What I'm saying is, in other words, if – to be having a divorce is not every easy, right? You know, it's not an easy situation. So I think what happens here – in business, where you don't commit your life, like in the private situation, right? You've got children and things like that. In the business, there's nothing like that. In business, I would say that if you feel that after two or three times, you're not – that you don't have the right partner, then... the best way to deal with that, is to do it as soon as possible. Don't let it, you know, continue, continue, and then brew forever. (Interviewee 14)</i></p>	4
If objectives are not achieved, reconfigure the strategic alliance or exit	<p><i>If it has achieved your objectives then I guess you tick that and say I've done the right thing. If it hasn't achieved your objectives then clearly you've now got to either re-configure that strategic alliance to achieve your objectives or you've got to find a way of exiting that strategic alliance.</i></p> <p><i>So it's not always a dollar and cents thing... quite often it's just achieving a particular objective which should translate into dollars and cents otherwise you wouldn't be doing it at all. (Interviewee 7)</i></p>	1,2,4
Exit as an alternative to change, if not buy the other party	<p><i>And the change is either the party's exit and if it's easy to exit, it's going to be easier to just exit, or what is probably the most common if it's not easy to exit is, one party buys out the other. (Interviewee 8)</i></p>	1,2
North Sea	<p><i>Sell to your partner, or sell to the market..., I would –</i></p>	1

<p>case, not common pre-emption rights. Follow a Selling process (data room-auction-sell)</p>	<p><i>occasionally, it might be so successful you can even float it. But... certainly in the North Sea, what you would tend to find is that interests in joint ventures are – are sold fairly – it’s – unlike some – some classic joint ventures, it can be quite difficult to extract yourself from... and it may be very difficult to – to sell, because the partner says, “No, I – I agreed to deal with you and only you. Only you have the resources that I need for this, so it just doesn’t make any sense for you to be able to sell. If you want out, then we go through some sort of ‘Russian Roulette’ process, and I have to be able to bid for your shares before you can exit.” The North Sea joint ventures don’t tend to work that way... increasingly, they don’t have pre-emption rights in them. So it – if a partner wants to get out of a joint venture, he’ll tend to set up a data room, run an auction process, and sell to the highest bidder... and as long as that highest bidder meets the relatively limited thresholds of having financial and technical competence that are set out in the joint venture agreement, then he’s free to sell to a third party. Sometimes, he has to offer to his partners first, and they can pre-empt. But more often than not, he can just sell out. (Interviewee 13)</i></p>	
---	--	--

The quotations above highlight the relevance of discussing and agreeing terms and conditions for exit. This category should be considered as a compulsory theme for discussion with the partners involved in the process of developing a strategic alliance.

The following diagram summarises the exit findings.

Figure 5-8.- Summary of exit findings



The diagram above represents the exit findings. Sometimes, provisions for exit were overlooked in the rush to make deals happen. Exit was highlighted as an alternative to change, acknowledging that interest has a ‘shelf life’.

Legal-Regulatory problems and risks (Technology, intellectual property, anti-trust and competition law)

Some interviewees referred to the legal-regulatory issues and risks that impact the performance of strategic alliances in terms of technology, intellectual property, anti-trust and competition law.

Technology and intellectual property issues (1,2,4)

Some interviewees pointed out the problems and risks related with technology and intellectual property (IP). It was acknowledged that IP is critical. One major concern was the strategic management of IP issues. A variety of strategies were suggested to deal with this. There are certain issues with intellectual property at an international level which are due to gaps in jurisdiction. Managing IP could result in issues with collaboration. IP ownership and restrictions could require a legal review of complex licensing agreements. This is illustrated in the following table of quotations:

Table 5-17.- Technology and intellectual property issues (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Critical to be clear on IP and know-how because strategic alliances end	<i>One area which is always very crucial and critical is that before you enter in negotiation of a strategic alliance, it has to be absolutely clear on intellectual properties because strategic alliance means that you have two parties where they would have their own heritage ... there will be developments, there will be know how, there will be results, which were only created or becoming available because the parties are together... you should always consider the strategic alliance as being a partnership of time, which means there will be a time when parties separate again because the business reason for the alliance disappears and then you want to be sure that in that separation process, both parties has the right to a good understanding about their rights to the technology, to the business... as a result of that alliance. (Interviewee 4)</i>	2,4
Loose technology or	<i>A lot of people are very concerned getting into a partnership that they lose technology or control or other types of things, so in some</i>	2,4

control	<i>cases, it might be what's my view of security of my key assets. (Interviewee 8)</i>	
Prescription: Keep control over the process	<i>Well, in some cases, you might say.... 'my partner will have no access to my technology at all.' 'I will do that part of the process with people one hundred percent under my control, or I will only transform-, I will only transfer into the partnership a finished good or, something that's already had the technology put into it. They will not participate in that part of the process. You may put a lot of systems controls in so that people can't have access to your computers, your intellectual property. (Interviewee 8)</i>	1,2,4
Prescriptions: legal protection, provide second best version of technology, have knowledge outside operations, catalyst outside JV (China)	<i>Can you think if you protect your own technology we are owned by. The intellectual property doesn't have to be necessary technology. The one is of course to work on a regulatory or legal basis to protect it. Now that, if you are to play it to China or so on, not so easy. So what may do is you don't go with your best technology to other countries. To regions where you don't feel comfortable about your intellectual property being protected. So you maybe go with the second best version of your technology or so. But you also, that's beyond doing the obvious. Protecting yourself legally.... having the knowledge in case of needed operations out side of the joint venture. And only supply for capital into the joint venture, and not put the catalyst into the joint venture. And look at practical aspects, like that. (Interviewee 9)</i>	2,4
IP & Technology lost (China), Prescription: Do not contribute with your latest technology or keep developing advancements	<i>The risk if you are contributing technology or intellectual property is that know how you've got, becomes available to third party, which in some form or another at some point, uses it independently. And of course we all know that's happened in China. We find out are catalyst sales in China were significantly higher than the productive capacity of the plants which were being built there. You find out that there's, basically your design and ingenuity has been copied. Independent plants have been set up. Say your strategic alliance which gave you a bridge into a market, ultimately leads you to losing the very technology that gave you the purpose in the first place. Of course that is well known. You can overcome that by either not contributing your latest technology, or keep developing advancements all the time. (Interviewee 12)</i>	1,2,4
Commitment to warrant technology is a signal of potential issues	<i>People that we decided to partner with said that they had a game changing technology that would reduce the cost of raising the product by forty percent but it was a major capital investment to do it, and neither one of us wanted to put that major capital investment in the smaller sized businesses but if we put the two together, we were able to finance it, and the technology didn't work. Simple as that...</i> <i>Eventually, we got the technology to work some but it was-, it</i>	1,2

	<p><i>wasn't as good as it was said to be and frankly, there was no real way to unwarrant the venture at that point but it ended up being sold...</i></p> <p><i>The warning sign for us probably should have been they refused... to back or certify the technology as workable as we were negotiating the engineering contract... What they were saying is, you know, it's not that we know it's going to fail, we just have no idea if it's going to work at this scale. (Interviewee 8)</i></p>	
IP issues at an International level due to gaps in jurisdiction	<p><i>And some of the issues that come up with it are, say for example you've got international regime for international property rights. But you're dealing across jurisdictions and there are gaps in where there is coverage or where there isn't coverage. So some of the issues there may be that you might want to retain your intellectual property rights but because you're partnering out of your jurisdiction you may not be able to because of finances, or maybe because there isn't a system that covers you sufficiently. You might not be protected with that partnership, so your intellectual property rights then become subject to others appropriation. (Interviewee 11)</i></p>	2
IP protection issues, either overprotection or dissemination without protection	<p><i>So you don't have information to be able to form alliances because there isn't enough detail. Because they are overly protective of their international property rights. And that could be a barrier to collaboration in the first place.</i></p> <p><i>A lot of individuals don't understand enough about how they can move their intellectual property rights so they can give presentations and discuss and publish information which then makes it difficult for them to claim those intellectual property rights. When you go into an alliance, because they've already made it public. It's in a public domain. So the issues were then for me to talk to people and get them to put on record, and to secure intellectual property rights within the organisation. (Interviewee 11)</i></p>	2,4
IP Ownership and restrictions could require a legal review of complex licensing agreements	<p><i>If you're talking about technology, you would need to consider ownership of intellectual property. How that was going to be handled. Whether the party that you're dealing with really does own the intellectual property that he says he does, and which you're relying on in order to be able to take forward your strategic alliance. And that can require a lot of legal review of sometimes some quite complex licensing arrangements, under which your partner has the benefit of certain technology. And maybe he's only got the benefit of that technology for a certain period, or in a certain geographical area, or subject to certain restrictions. (Interviewee 13)</i></p>	1

The quotations above show the concern that the industry has regarding intellectual property rights and technology. It is interesting to see that contracts alone are not enough to protect technology and to note the need to develop strategies. This reflects issues concerning trust amongst parties.

Antitrust and competition law issues (RQ1-4)

Only one interviewee raised issues related to anti-trust matters and competition law. Anti-trust compliance could act as test for a strategic alliance in probing commitment to and rational for its development. Competition law is not a large problem for JVs in oil as long as there is competition in selling the product. Maximising recovery in the UK as highlighted in the Wood Review needs further analysis. The EU might investigate the competition dynamics of North Sea oilfields due to some of the common terms of collaboration. The following table of quotations illustrates this:

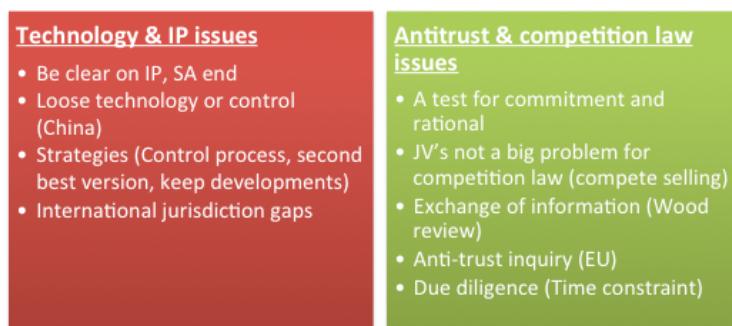
Table 5-18.- Antitrust and competition law issues (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
A test for commitment and rational of a strategic alliance	<i>There may be anti-trust issues that you need to address at that stage. There may be clearances you need to obtain, in order to allow the alliance to go forward.... and that is quite a good test in some ways, of whether there is genuine commitment to the alliance and also whether there's a genuine reason for it. Because if there's a genuine reason for it, if both parties are bringing different things to the party, it's much easier to construct a justification for any competition law issues that may arise. (Interviewee 13)</i>	1
JVs not a big problem for competition law, as long as there is competition in selling the product	<i>Where the parties are potential competitors. So if you take a joint venture to develop a hydrocarbon license, operators are potential competitors in relation to that. But generally speaking, the creation of a production joint venture is not a big problem under competition law, as long as the parties are able to separately sell... their own share of production. The competition authorities will say that it is an advantage to the consumer to have more oil and gas produced. And if none of those parties would be prepared to produce it on their own, the fact that they could join together to produce is – is therefore a good thing, as long as they then compete when it comes to selling it. (Interviewee 13)</i>	1
Wood review analysis in terms of information to be exchanged	<i>Well, maybe we should do it. Maybe it's a good thing to do it. But we have to analyse the competition implications of doing it. And see whether the benefits that the consumer will get from, for instance improving production in this area of the North Sea, or</i>	2

	<i>improving the length of the life of this infrastructure, are justified by the fact that we will have to exchange a certain amount of confidential information between us that would not normally be permitted. (Interviewee 13)</i>	
Potential risk of anti-trust inquiry from the EU	<i>The strategic need for collaboration from the perspective of... the UK Government, which is very much in favour of this in order to maximise production. With the significant potential risk to the company of an anti-trust inquiry, which would come not from the UK Government, but probably from the EU. (Interviewee 13)</i>	2
Due diligence to identify risks, but constrained with the times to do business	<i>I think very often, the due diligence is not anywhere near that extensive... and there will be some – some basic financial due diligence, and then there will be the discussion of how the parties are going to work together on a very particular project. And that's about as far as it goes. But it's got to be balanced against the time and expense that people have available... to devote to these things. Because if you want to get on with your project and somebody says, you know, "Give me two months to dig around into this company," you're going to say, "No, we need to – we need to start. We need to start now." So there's always those competing pressures. (Interviewee 13)</i>	2,3,4

The following diagram summarises the findings of Legal and Regulatory risks.

Figure 5-9.- Summary of findings of legal and regulatory risks



The diagram above represents the two subcategories that emerged from findings in the legal-regulatory category. IP and technology were highlighted as a major concern and interviewees suggested some strategies to deal with this.

Culture (RQ1,2,4)

Accounts from some interviewees pointed out the problems related to differences in culture and suggested ways to deal with these.

Different organisational cultures (RQ2,4)

Some interviewees pointed out the issues which arise in dealing with different organisational cultures. It was suggested that time be taken to understand different cultures and ways of working. This leads to a process of change which, if not properly managed, could result in misalignment among partners. The perception of failure related to differences in culture and disputes about control was also highlighted. Again, marriage was used as a metaphor to illustrate culture and the risk of termination of the alliance if it did not work. The following table of quotations illustrates this:

Table 5-19.- Different organisational cultures (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Working with different cultures leads to a process of change	<i>I mean you've inevitably got cultural issues... often you don't realise the strength of your own corporate culture, until you try and do an alliance with someone else's corporate culture. But you're suddenly working in different organisation with equally strong corporate values coming from the other side. Sorting out the change of process, the cultural or development of the alliance, is a very critical aspect of making an alliance successful. . One of the biggest issues. (Interviewee 12)</i>	2,4
Misalignment due to different backgrounds and ways of working. Overcoming issues requires time, money and resources	<i>There are all kinds of ways that people can become misaligned when they actually do anything together, because they come from... separate backgrounds and they have all these separate ways of working.</i> <i>Now I think people will often use the word culture... None of these things are impossible to overcome but you do have to invest time and money and resource in order to overcome them. (Interviewee 6)</i>	2,4
Can prise collaboration apart and promote unhealthy competition within alliance	<i>Very often, these structures fail because the culture in the companies coming together is so different that people do not really work together properly. They don't understand each other and then they are not on a converging operating mode but on a diverging operating mode in the sense of, I want to prove that I'm the better guy. (Interviewee 4)</i>	2
Work together,	<i>Cultures, different companies have got different cultures. Making</i>	2,4

have a good marriage	<i>sure that the cultures actually work together... And making sure that there is a good marriage in the culture. So if that doesn't work, then, you know, the alliance breaks down. (Interviewee 14)</i>	
----------------------	---	--

These quotations show a connection between culture and other categories such as alignment and change. There is a need for organisations involved in strategic alliances to adapt to different cultures.

Dealing with cultural issues (RQ1,2,4)

Some interviewees highlighted ways to deal with cultural issues. For instance, the importance of leadership and having people with skills in change management were highlighted and that the alignment of behaviour could impact trust. Conducting pilots to minimise the risk of exposure was suggested as an option. This is illustrated in the following table:

Table 5-20.- Dealing with cultural issues (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Culture issues require leadership and effort. People with change management understanding. Management demonstrates new cultural norms. Behaviour has an impact on trust	<i>Well the cultural one I think is a case of very significant amount of effort, and probably a far larger amount of leadership time, than is normally allowed for. In our experience and effectively what we did, we put somebody in the new company or new alliance, we put them through all kinds of change management understanding training. You constantly mix up the teams. You've got to reward success at the right time, so you're recognising good behaviours versus less good behaviours. Management is actively demonstrating what they consider to be the new cultural norms versus the old cultural norms. And visibly leading the organisation into a new place. Very often I would say that management does not appreciate the amount of time they need to take, on developing a new culture. And also their own behaviours, sending the right signals to their staff. If you don't work in accordance with the way the strategic alliance has spoken, or indicated it wants you to act, then you can very quickly destroy trust within the organisation and very quickly you have separate teams operating in the same organisation. (Interviewee 12)</i>	1,2,4
Look for similar cultures and conduct pilots to minimise risk exposure	<i>I think that you need to identify companies that – they have similar cultures... Bigger companies, conservative companies, will actually try – will always try pilots, to actually – to minimise the risk and the exposure. (Interviewee 14)</i>	1,4

The quotations above establish a connection between culture and leadership, where leaders should have sufficient skill to manage change. Cultures perceive behaviours in different ways and some differences could bring some issues around trust.

Culture and success (RQ1,24)

Some interviewees cited culture as a factor for success at national and organisational levels. A requirement to work with different cultures by being open and accommodating the needs of the strategic alliance, was suggested. This is contrary to the situation in large companies with rigid rules and suggests that flexibility is important in choosing a partner in developing countries. It also suggests that the rigidity found in larger companies might not be ideal. This is illustrated in the following table of quotations:

Table 5-21.- Culture and success (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Culture a factor for success, create collaborative teams	<p><i>Culture is probably overlooked as a factor in a lot of strategic alliances... I know it's an enormous factor in the success or otherwise of mergers. And I can't imagine it's much less significant in a long-term alliance where people are going to have to work together.</i></p> <p><i>The success is to do with the culture and whether the parties have managed to create a really collaborative team. (Interviewee 13)</i></p>	2,4
Flexibility to deal with cultures. Large companies more rigid	<p><i>Well I think where we've worked with the cultural thing, has worked really well... one shouldn't be too prescriptive when you start engaging with a partner.</i></p> <p><i>When you are far more open to tailoring it according to what their needs are of that specific joint venture. So that's one aspect that they've found open doors for us. As opposed to being one of the big major chemical companies which has it's own advantages. But one thing that's a disadvantage there is that there's only one way, and that's the big company way. And if you work with companies in the developing world... We found it actually opens door by not being that prescriptive. (Interviewee 9)</i></p>	1,2,4

The quotations above show that culture could be a determinant for success. This depends on both the collaboration of the organisations involved and on the flexibility to adapt to other cultures.

Figure 5-10.- Summary of findings of culture



The diagram above represents the findings on Culture. Differences in organisational cultures could result in misalignment. Leadership, taking time to understand culture and skill in the management of change were highlighted as a requirement in dealing with issues.

Clarity (RQ2,4)

Some interviewees identified clarity as a critical factor. Where objectives and benefits are not clear, problems could arise and so clarity was also acknowledged as a factor for success.

Clarity in objectives and benefits (RQ2,4)

Clarity was also highlighted in terms of alliances' objectives and purpose, and was suggested as being critical in the development of a common understanding amongst participants, thus facilitating alignment in terms of sharing a common vision. The metaphor of marriage was again used to highlight the attributes of a good strategic alliance in terms of not having to revert to detailed contracts to find solutions to issues which occur during the development stage. Clarity of objectives and benefits were seen as important in a win-win situation; a lack of clarity would negatively impact the reputation of a party. Clarity is needed in the plan and scope of the strategic alliance. Transparency and honesty is required of the people involved. The value proposition for the customer needs to be clear.

Table 5-22.- Clarity in objectives and benefits (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Clarity in objectives – Alignment – Marriage- better if do not look at the contract	<p><i>And probably the most important is clarity about what the strategic alliance is there for, what is it trying to do, what is the point of the strategic alliance? So you know if you start in a strategic alliance and the two parties don't have a commonly held view of some kind of positive vision for that alliance, then I think that's an issue. And again I will make a differentiation between a strategic alliance, which I think is a long term, I mean they focus more on the long term, and focus more on the moving towards some kind of shared vision, rather than a short term commercial optimisation.</i></p> <p><i>So, you know the challenge is trying to keep the partners aligned for as long as possible and it generally is like a marriage, the easiest partnerships are the ones that you never have to look at the contract again because you both have the same goals in the end. (Interviewee 1)</i></p>	2,4
Clarity on benefits. Win-win situation otherwise could impact reputation	<p><i>I think you'd have to be very sure of what you wanted out of the alliance. And make sure you knew what the partner would, they need to understand what they would gain by the alliance, it has to be a win, win situation. If you are sure that you would benefit, but you're not sure how they would benefit then your conversation would stop quite quickly. And you wouldn't gain that alliance and also it would be bad for your reputation. (Interviewee 11)</i></p>	2,4
Strategic plan & a clear value proposition	<p><i>That you [have] a very... clear, laid-out strategic plan... How it will be staffed... what kind of scope the alliance will have...you need ... a number of things well thought out, before you launch the alliance.... You need to have a very clear value proposition... that's to me – it's critical. The moment you go out in public and say, "Now I'm in an alliance, or in a JV with this party, and our value proposition is this" (Interviewee 14)</i></p>	2,4

Clarity critical for success (RQ4)

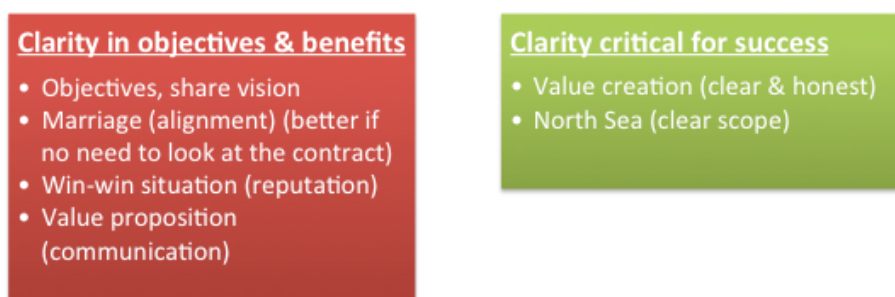
Some interviewees pointed out that clarity was critical to success in terms of honesty around the level of value being created. The North Sea was cited as an example of success being related to clarity. This is illustrated in the following table of quotations:

Table 5-23.- Clarity critical for success (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Clear and honest about	<p><i>So... there was no... confusion... about...what both sides was bringing to the party... it was very, very clear... what people</i></p>	2,4

value created	<i>were bringing... so... I think that was the key factor of it. The success factor is being really pretty honest about the analysis of whether or not value will be truly created or if it's just an aspiration. (Interviewee 1)</i>	
North sea cases clearly scoped	<i>Most joint ventures in the North Sea... are successful within their terms, because they're relatively...clearly scoped and relatively limited in their ambition. (Interviewee 13)</i>	2,4

Figure 5-11.- Summary of findings of clarity



Stakeholders (RQ1,2,4)

The role of stakeholders in the development of strategic alliances was highlighted, as there are sometimes diverging interests in the development of strategic alliances. For example, in natural resources development, governments disperse the risk through the terms and conditions, for instance in production sharing agreements. It was suggested that risks should be assessed with a long-term perspective and take other factors into consideration - for example political risks such as the potential for nationalisation. Another example is the impact of communities on the development of an alliance, as the shale gas and wind energy industries have shown. The following table illustrates this:

Table 5-24.- Stakeholders (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Governments and the allocation of risk	<i>Governments that try and put all the risk on the oil companies, and give them very little of the return, or give them a return after so much has been taken to fund their own needs... Right, are not going to find willing partners.</i> <i>Look at the Brazilians today. They can't find willing partners because the risks are very great, and they are asking the oil companies to take all the risk. (Interviewee 3)</i>	1,2
Prescription:	<i>So you are looking down the road and you are saying what are my</i>	4

long term assessment (think down the road)	<i>objectives, how can I get hurt, what are the risks, how do I protect myself.</i> <i>So you are thinking down the road, especially in our industry. You are thinking about what's going to happen ten years down the road, everything that we do takes ten years. (Interviewee 3)</i>	
Government and political risk	<i>Well... six, seven years later Mr. Chavez decides that he is going to nationalise the crude stream.' (Interviewee 3)</i>	1,2
Community approval, shale gas and wind energy	<i>And again you see that with shale gas, you see it with wind turbines. That's why those environmental behaviour factors of a live community can have a significant impact on whether the alliance can go ahead, and whether it will be successful. (Interviewee 11)</i>	2

Figure 5-12.- Summary of findings of stakeholders

Stakeholders
<ul style="list-style-type: none"> • Government and allocation of risk • Long term assessment (think down the road) (Change?) • Government-Political risk- Nationalisation (Venezuela) • Community approval (Shale gas & Wind energy)

Trust (RQ1,2)

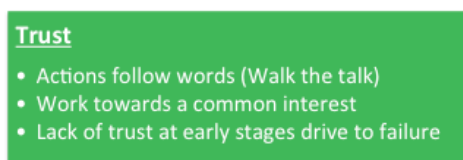
Some interviewees interpreted lack of trust as a source failure in the development of a strategic alliance. It was suggested that trust comes from actions and actions follow spoken commitments. When there was a lack of trust in the early stages a strategic alliance might fail. This was illustrated by the case of a company in China failing to make a deal. Although it was based on good market fundamentals, it fell apart mainly through a lack of trust. The company had insisted on having the governing law of JV based in its home country rather than in China, the host country for the joint venture. This is illustrated in the following table:

Table 5-25.- Trust (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Trust comes from actions following words (Walk	<i>Trust, lack of clear objectives and targets...different drivers from the partners... changes of circumstances that were not anticipated... at the time of... entering into the relationship.</i> <i>And the trust comes through the negotiation...the trust comes from</i>	2

the talk)	<i>the actions following the words. So, it's... just something that needs to be developed, and every time that you do not fulfil something you said, the trust gauge goes down... And there's...when you reach the bottom, then is when trouble starts. (Interviewee 15)</i>	
Trust in working towards a common interest	<p><i>In particular lack of trust... if you don't truly believe that your partner... is working towards the common interest... then it's very, very difficult to be successful... so for me that's the big risk of failure really around trust, trust that your alliance partner is working towards the common good... and recognises that a time like common good will be negative for them or for their legacy organisation. But in time will be positive for them or their legacy organisation, but overall you know it's the right thing, it will create value overall.</i></p> <p><i>If you insist that every single factor is a separate negotiation and must be in your favour... as opposed to saying okay look the important thing is that the overall... alliance works. And you know so long as the combination of all those elements creates a positive value, and so long as there is some reasonable way that I can see that that common value will be shared between the... two parties... then that's good. But if you don't have, if you don't have trust and you start to sub-optimize in those... different decisions then I think that's where you have got a problem. (Interviewee 1)</i></p>	2
Lack of trust at early stages drive strategic alliance to failure	<p><i>Issues started during the planning of the facility, and the lack of trust, and all those types of things.</i></p> <p><i>And then from a performance measurement afterwards you know I don't think it really went well, I don't think there was a good common view of what they were trying to achieve. So in many ways trying to measure and discuss was the alliance working, were things going well...wasn't a positive experience. And ultimately that venture failed... (Interviewee 1)</i></p>	1,2

Figure 5-13.- Summary of findings of trust



Leadership (RQ1,2,4)

Only one interviewee pointed out the issues and risks related to leadership and its influence on the performance of strategic alliances. This was important as it highlighted connections with alignment, clarity, culture and stakeholders. There is a need for leadership in each partner organisation to focus on maintaining a shared vision and sustaining alignment. Not having clarity in role or strong leadership to deal with different cultures was a root cause for failure. This is illustrated in the following table of quotations:

Table 5-26.- Leadership (LR: Performance of Strategic Alliances)

Key themes	Quotation	RQ
Leadership to manage cultural differences	<p><i>The first few years of that alliance were not all that successful, and I think one of the reasons is there was not clarity around who was running the company; there were effectively three leaders of the company. And it wasn't until... leadership was unified under one guy that this alliance began to, really began to work, because there were too many fights around well you know my legacy technology is better than your legacy technology, my legacy operation is more efficient than your operation, you know all that type of thing.</i></p> <p><i>I think the leadership... you know for me these are principally matters of leadership. And if you don't have strong leadership, then you know then bringing two cultures that don't fit particularly well together... that can be very, very tough... and I have seen, particularly as a consultant I have seen lots of examples of that. You say wow you know how are you going to achieve your goals when you have got two organisations which culturally can be quite different, and you don't have sufficiently strong leadership... (Interviewee 1)</i></p>	1,2
Strength of leadership to manage risks	<i>The main risks are principally organisational...the principal risk is really to do with the people and to do with the organization... Do you have strong enough leadership to be able to get after those risks, and manage those risks, and make some tough decisions at some points?... (Interviewee 1)</i>	2
Leadership and a new culture-reach potential	<i>And then from that point was really the development of a new culture around... the new company the alliance company rather than around the legacy company...and then for me then that change in leadership really allowed them to reach their potential. (Interviewee 1)</i>	1,2
Leadership share vision, best interest of stakeholders	<i>If you have two leaders who have a shared view... that... this alliance is in the best interests of the stakeholders in general. So the people who own the company, the people that work in the company, the communities that the company operates in. So if you have two leaders that have a shared vision about why a strategic alliance would make sense, whether it's a small one or a large one. I think</i>	2,4

	<i>that is absolutely critical and they are able to communicate, transmit their commitment to the alliance, to the people who are you know working the alliance... (Interviewee 1)</i>	
Transmit and ensure people understand the rational of the strategic alliance	<i>I think the failure factors are principally failures of leadership in terms of not taking that strategic direction and enabling your organisation to succeed, by making sure that they understand, they have got clarity, transparency about what's happening... they know what it means for them, they understand the whole picture... and then they are being encouraged to actually... execute, so where those things don't happen that's for me the failure factors. (Interviewee 1)</i>	2,4

Figure 5-14- Summary of findings of leadership



Conclusion

This chapter presented the findings of Performance, useful in addressing most of the research questions. Firstly, it presented the findings on how interviewees perceived measurement in strategic alliances. As every strategic alliance is unique, metrics should be developed according to its context and objectives. A matrix employing diverse metrics could be designed to facilitate the monitoring and control of alignment. Measurement was perceived to be difficult and included hard and soft metrics. Soft metrics could include cultural issues and stakeholders' preferences. The metaphor of marriage was used to attempt to explain that measurement was about the perception of the performance of each partner. It was suggested that a joint and periodic assessment of performance be carried out. This would assess the strategic alliance according to its objectives and goals and make decisions where differences occurred, reconfiguring or exiting the alliance as appropriate.

Several categories emerged from the Problems findings. The categories of problems, critical factors, risk, failure and success were analysed and selected according to the frequency with which they were cited by interviewees. Their interrelations were considered and the findings for ten subcategories presented.

The most common theme was Partner. Interviewees identified the relevance of partner selection, their capabilities in technical and financial terms, the issues related to vested interest, the benefits and complexities of partnering and the need for a win-win mind-set. It was of particular interest that the subcategory ‘the benefit of partnering’ could help understanding as to why organisations engage in the process of strategic alliances (despite high tension and conflict referred to as the ‘highland game week’. complexity and the issues around change and alignment). These subcategories are key issues in the performance of strategic alliances and require further analysis.

Alignment amongst partners emerged as potentially having a negative influence on performance. Differences in interests, objectives, expectations, drivers and approaches from different partners, were identified as connected to alignment and success. A difference in size or financial resources could result in diverse expectations amongst partners. Problems could also arise from a difference in perception on the balance of rewards. In order to achieve the expected outcome, it was perceived as critical to work together and maintain alignment between partners. This would demand a continuous process of negotiation.

Change was perceived as something natural in strategic alliances. Expectations, interests and objectives change and therefore there was a need to have flexible documentation, an exit plan and open and transparent communication between partners. When change occurs, partners can react in a variety of ways according to their options outside the strategic alliance. Understanding the source of change was considered important in preventing potential issues and mediation was suggested as a tool to counterbalance differences. Markets change, especially in the oil industry, and price variation is common. Strategic alliances therefore require continuous re-calibration and adjustment. Even if performance is below expectations, strategic alliances could continue operating as other alternatives could be worst. This could explain why some strategic alliances continue despite their performance not being as expected. Failure could be a perception; the natural end of strategic alliances should be understood. The dynamics of objectives and interests should be considered in relation to strategic alliance failure. Change was perceived as complex and it was acknowledged that every organisation has its own beliefs and ways of working. A need to have people with the skill to manage change was identified.

Some issues related to exit were identified and a variety of strategies were suggested to manage it. Exit could be complicated should one partner have all its interests committed to the strategic alliance. It was suggested that agreements have provision for termination and a robust conflict resolution mechanism. Exit was perceived as an option both for the natural end of a strategic alliance and as an alternative to dealing with change.

The legal-regulatory problems and risks category emerged as having two subcategories: technology and intellectual property issues and antitrust and competition law issues. One major concern was in losing technology and in certain countries the risk was higher. Strategies to protect IP and technology were suggested, such as controlling the process, providing a second-best version of technology and the continuous development of technology. There are some gaps in jurisdiction at the international level which increases the risk of losing technology. As for the anti-trust and competition law issues, following processes in order to satisfy regulatory requirements could be perceived as positive in terms of testing the rational of the strategic alliance and the commitment from partners. In the oil and gas industry, JVs were not perceived as being as big a problem as mergers as long as there was competition to sell the products. The Wood Review would encourage the exchange of information and this could bring some anti-trust inquiries from the EU. Due diligence could be useful in assessing potential issues, however the time for these to be explored could be constrained by the urgency for closure.

Culture was another category that emerged from the interviews. Differences in cultures require time to understand others' ways of working. By entering into a strategic alliance, dealing with different cultures and ways of working, organisations become immersed in a process of change resulting in being able to work together. If the process is not managed properly it could result in misalignment amongst partners. Differences in culture could produce failure in the alliance as illustrated by the metaphor of marriage. Leadership and skills in change management were perceived as being important in dealing with different cultures. The impact on trust of congruent behaviour was also highlighted. Conducting pilots to minimise the risk of exposure was suggested.

Clarity was identified as a factor which could facilitate alignment among partners. Clarity around objectives and benefits as a win-win situation for the parties was important as

otherwise reputation might be negatively impacted. Clarity was perceived as being critical to success.

The need to consider stakeholders also emerged. Governments disperse risk through terms and conditions to develop natural resources. Risk assessments require a long-term perspective; difficult situations could arise from political risk. The increasing influence of communities in the development of strategic alliances was identified, for example in the case of shale gas and wind energy projects.

Issues with trust were identified as a source of failure for strategic alliances, along with differences in culture. Actions and fulfilment of commitments signified trust.

Leadership in relation to clarity, culture and stakeholders also emerged. Leadership is required to manage cultural differences, risk and in the development of a shared vision in the best interests of the stakeholders. Leaders play an important role in ensuring that the rationale of the strategic alliance is understood. Lack of leadership was perceived as a factor in failure.

The diversity of the categories which emerged in these findings are linked with the need highlighted in the literature to take a multi-constituencies approach in performance measurement for strategic alliances. Furthermore, findings provide a set of categories based on the perspective of key informants in the energy industry which are full of prescriptions and can enrich the process of developing a strategic alliance. In the Discussion chapter, I will elaborate further on these findings and on the relationships between these categories.

This chapter presented the findings for the third element (Performance) of the holistic process model and its sub elements: measurement, problems, risks, critical factors, failure and success. The following chapter presents the findings for the last two themes and elements of the holistic process model: Influence and Prospects.

CHAPTER 6 'FINDINGS-INFLUENCE & PROSPECTS'

Introduction

The aim of this research is to gain an in-depth understanding of the performance of strategic alliances in the energy sector by drawing on an in-depth qualitative study of the perspectives of those with experience in strategic alliances in the sector. This chapter presents the last two themes of the 'Findings' chapters which are related to the influence and prospects of strategic alliances. Interviewees were asked about the influence that external constraints and executives and managers have over strategic alliances. The final theme under prospects is about interviewees' perceptions regarding the future of strategic alliances and the challenges that they could foresee. Influence and Prospects are the final two elements in the holistic process model; these and their respective sub elements are presented in the discussion chapter.

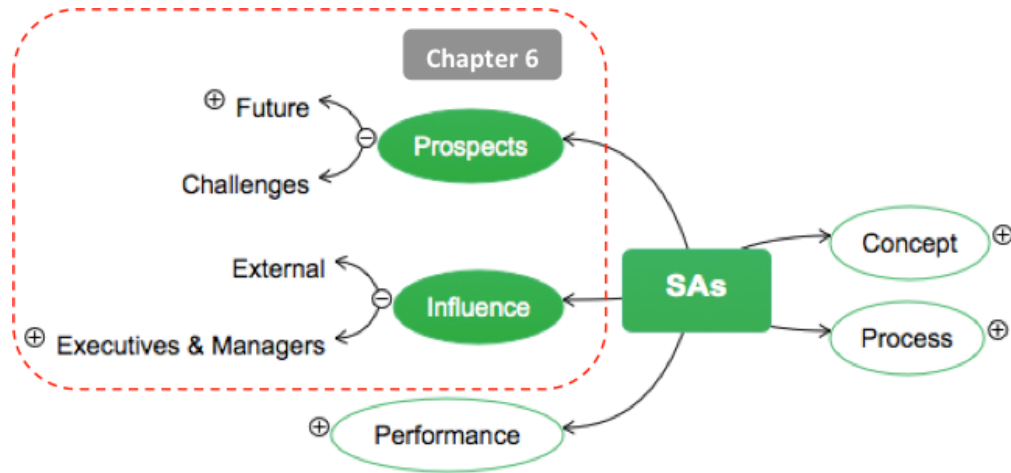
The following research questions (RQ) were posed in Chapter 3 'Methodology and Methods':

- RQ1: How and why have strategic alliances been developed in the energy sector?
- RQ2: How and why do strategic alliances succeed or fail?
- RQ3: Why do firms engage in strategic alliances despite low success rates?
- RQ4: How can we create more effective strategic alliances in the energy sector?

These findings were used to inform the study's research questions (Goodson 2013). I have sought to assist an understanding of the narrative by presenting the findings using tables and diagrams. The format of each section is as follows: Firstly, I have presented a narrative of interviewees' quotations. Secondly, where a table is presented it contains 3 columns entitled 'Key themes', 'Quotation' and 'RQ' (Research Question). 'Key themes' consists of relevant ideas from the 'Quotation' and assist the narrative. The participants' quotations are connected to the research question that they inform, as specified in the column 'RQ'. In sections where tables are not employed, the relevant research question is identified in brackets. The quotations are verbatim except where minimal editing was required to preserve confidentiality. Diagrams are presented in the sections and subsections in two places: those at the beginning illustrate key themes while the diagrams at the end condense key findings.

The following diagram highlights the sections that are presented in this chapter, related to influence and prospects.

Figure 6-1.- Structure of Chapter 6



Influence

I explored interviewees' perceptions of the influence of strategic alliances on two dimensions. Firstly, external influence, interviewees discussed their perceptions of the external constraints that strategic alliances faced. This was followed by internal influence where the interviewees gave insight as to how executives and managers were able to influence the performance of strategic alliances. The skills that managers in alliances should have emerged as a theme of interest and this was also explored during the interviews. The findings are reported in the following sections.

External sources of influence (RQ1-4)

During the interviews, various external sources of influence that served to constrain the development of strategic alliances emerged. These sources were as follows: governments and markets, legal and regulatory, political, cultural, other stakeholder and market influences (see Figure 6.2). The instance of government was of particular interest because, on the one hand, it was seen to impose constraints on organisations that develop strategic alliances, yet, on the other hand, such influence was also seen to encourage their development by enforcing partnerships. The nature of markets was also perceived to

encourage alliances as in the case of Japan where strategic alliances with locals facilitated access to a market with a complex structure. I will discuss each of the five categories of influence in turn.

Figure 6-2.- Categories of external sources of influence



The figure above illustrates the categories that emerged from external influence: (+) denotes encouraging strategic alliances, while (-) denotes constraining strategic alliances. As can be seen, government and markets could play a dual role. The categories are explained as follows.

Role of the Government and Market's configuration (RQ1,2)

Some interviewees believed that the Government imposed constraints in the development of strategic alliances by determining market entry conditions, but at the same time strategic alliances were enforced as the only way to enter and have access to attractive feedstock and sometimes by partnering with the National Company, as expressed in the following quotations:

There have been times where a number of countries have said, "The only way you, as an outsider to my country, can invest is if you have a local partner." China went through this period... depending on how the political situation is in China and the

investment situation, they have allowed, or not allowed, what are called wholly owned foreign enterprises...

There are times where we said, "Look, we think China is the most exciting place that we want to be and we want to do this." China will say, "Well, we're happy to have you here but you have got to do a fifty/fifty deal with..."

For years, places like Egypt did that and told any foreign company that wanted to invest in the country, you had to have thirty percent of the company owned by Egyptians. (Interviewee 8)

Access to feed stock in the industry where you've got the increasing influence of governments and national organisations, national companies. Very often you simply can't get access to those economically attractive feed stocks, without having some kind of alliance with the state company or the national company. (Interviewee 12)

In the Middle East, you know, I don't see, um – I think the role of the state is – is actually very important to – to understand. You know, if you have, um – in an open market, you need the alliances in order to address the fast moving market spaces. In a closed market, you – you may also need an alliance to exploit the space. (Interviewee 14)

Some interviewees pointed out that at the same time the Government could be a facilitator for the development of the business and encourage collaboration. This was the case in UK, through the promotion of the Wood Review, as illustrated in the following quotations:

The government and relationships can facilitate contact and the communications, and of course can actually drive a deal taking place. (Interviewee 12)

The Wood Review as encouraging strategic alliances, very much. Because it has a very strong theme of collaboration and is requiring, operators to take a much broader view of their obligations... it's requiring them to look at ways of maximising resources across the whole of the basin and that will require them to work together with other joint ventures in the area... (Interviewee 13)

The quotation above shows how governments try to maximise the development of the country's natural resources by encouraging collaboration. The United Kingdom is an interesting case because of the maturity of the petroleum industry.

Several interviewees highlighted that in order to access some markets there was a need to develop a strategic alliance. Therefore in some countries, rather than being a constraint, this tended to encourage the development of strategic alliances. An example of this was the structure of the Japanese market, as illustrated below:

The Japanese market like Japanese economy I suppose is very structured. And the way that many companies enter markets is through multiple layers. So you very rarely have a producers that is directly assisting the consumer. You have in very many cases, three, four, five, six layers of intermediaries, perhaps going between one and the other. Some of the intermediaries have cross shareholding relationships, long personal relationships. Or some of them have historic relationships, which at a corporate level go back to the very formation of the organisations. So they're very strong and effectively control access to markets. So if you try to get into a market place such as Japan, where you have those very controlled channels to the customer. Then one of the ways you can do that is to form an alliance with a Japanese player. Effectively what you're then doing is piggy backing on their secondary, tertiary relationships. That's the way to get your products into market. (Interviewee 12)

The quotation above shows how a strategic alliance facilitates entry into a market with a complex configuration. Similarly to governments encouraging strategic alliances, when the market configuration encourages the development of strategic alliances there could be some restrictions to find the appropriate partner, for example, sometimes there is less scope to select partners in remote locations or politically restrictive environments.

Legal and Regulatory constraints (RQ1)

Some interviewees pointed out that the constraints imposed by Law and Regulations related to competition law, especially in cases when market share increases as an outcome of the alliance. There was also a perception that there were fewer competition constraints for strategic alliances than for mergers - also the case with fiscal, anti-bribery and corruption legislation. This is illustrated by the following quotations:

I think there's a lot of legal constraints... depending on the jurisdiction where you want to do it, and depending on the level of complexity that you want to do it... that's quite a lot of influence. ...; tax can have a lot of influence..., anti-bribery and corruption can have a lot of influence. ..., competition could have influence. (Interviewee 15)

If a partner is state-owned that can require you to treat the employees of that partner as foreign public officials, for the purposes of bribery legislation. (Interviewee 13)

Yes well one is competition law of compliance. So in some jurisdictions it can be constrained by that. So that can be on a technology basis, a market basis of course if the combined alliance of market share becomes too big, then you probably get competition authorities prohibiting that alliance. (Interviewee 9)

And I think in the case of alliances, I don't see constraints so much. Because in the case of M&A, I do see. In the case of M&A, we have the competition authorities that ... will allow... a deal to take place only if it includes disposals of certain, sort of... positions. (Interviewee 14)

The quotation above shows that, from a regulatory standpoint, it could be less problematic to develop a strategic alliance than a merger or acquisition. This gives the sense that strategic alliances could be an intermediate step in achieving a merger and could form part of the analysis of the business options for an organisation.

Political Constraints (RQ1,2)

Some interviewees believed that political sanctions imposed a constraint on the development of strategic alliances and illustrated the cases of Iran and Russia. Political constraints could also arise from concerns over security issues, for example, petroleum imports from foreign countries through strategic alliances. This is expressed in the following quotations:

The extent to which the authorities or government in certain countries do want to allow your own development in a certain country and region. So this would be Iran for England at the moment. It's difficult because of the, in the United States, sanction costs. So that's another area. So if one wanted to have, basically wanted to have a joint venture with strategic alliance with Iranian national company then you couldn't do it... ' (Interviewee 9)

At the moment, I'm aware that it's very difficult for oil companies to enter into strategic alliances with Russian companies, because of sanctions. And I'm certainly involved in – in various discussions about arrangements, which may have to put on hold at least, because of the current sanctions, regarding the situation in Ukraine.

US and North American companies have entered into arrangements with joint ventures with Chinese companies... that has caused concern around security issues and issues about the extent of influence of Chinese companies over hydrocarbon resources and things like that... (Interviewee 13)

The quotations above highlight different political constraints, for example in Iran, where sanctions have been in place for long periods of time. They also show how political constraints emerge from other situations such as in the case of the Ukraine. This provides a sense of the dynamics of external influence and context change. These must be considered in the process of developing strategic alliances, by incorporating a dynamic feature in the process to accommodate emergent opportunities and changes.

Culture as a constraint (RQ1,2)

Some interviewees commented on the relevance of culture in the performance of strategic alliances. It was identified as a constraint which derived from working with foreign organisations where the reporting and transparency requirements and legal structures were different. This is illustrated in the following quotation:

Cultural constraints when you're working across border, cross cultures. The acceptance of working with foreign organisations. The reporting requirements, are sometimes different legal structures, transparency so on and so forth. Requirements can put very I suppose, hidden, challenges into a strategic alliance. (Interviewee 12)

Other Stakeholders. Communities and Financial institutions (RQ1,2)

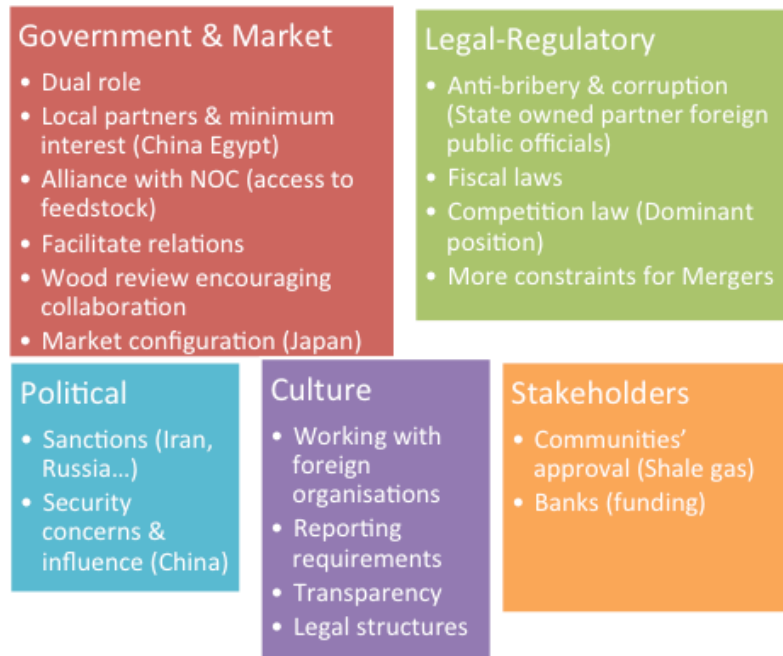
One interviewee referred to other stakeholders as able to impose constraints in the development of strategic alliances. Both the important role that communities were having in the development of unconventional resources and how financial institutions' requirements needed to be satisfied to get the funding for the development of the alliance were mentioned.

And very often the wider population can play a very significant part in whether those alliances can go ahead. And again you see that with shale gas, you see it with wind turbines. That's why those environmental behaviour factors of a live community can have a significant impact on whether the alliance can go ahead, and whether it will be successful.

But you're looking at the environmental section of alliances in your home market and the recipient market. And of course, for banks to be funding you need, you've got to go through your environmental assessments, sign off on your ecological footprint as well as your economic footprint. (Interviewee 12)

The external influences findings are summarised in the following figure.

Figure 6-3 External sources of influence



Governments and markets could play a dual role. They could impose constraints in the form of requirements to develop strategic alliances, but at the same time could also encourage the development of strategic alliances as the only way to access feedstock or certain countries. Laws and regulations such as those concerning anti-bribery and corruption, fiscal and competition law, could impose constraints which could determine the viability of a strategic alliance. There was the perception that mergers face more constraints than strategic alliances. Political sanctions could limit the development of strategic alliances, for example in Russia or Iran where organisations of certain countries were prohibited from developing businesses. In another example, overseas investments from China could cause some security concerns in the influence on natural resources of the host country. The success of international strategic alliances is threatened by the complexity of the different cultures of foreign organisations, different reporting and transparency standards and different legal structures. Communities could constrain the development of strategic alliances, and were playing an important role in the feasibility of developing unconventional resources. Requirements from banks to obtain funding could also impose constraints.

These findings show how external influences can either facilitate or constrain the development of strategic alliances. It is therefore important to integrate the analysis of external influence into the development process of strategic alliances. Furthermore, the categories that emerged from the data can be considered as part of the analysis in order to see how these might affect the alliance.

Executives' & Managers' Influence (RQ1-4)

I explored the perspective of interviewees with regards to the influence of executives and managers in the performance of strategic alliances. For the purpose of the research, I differentiate between executives and managers; executives work at the parent company level and managers are those directly involved in the strategic alliance. Findings were organised under the categories of dilemma of interest, degree of freedom, executive's role and the skills of the right people. These categories are illustrated in the following figure.

Figure 6-4.- Categories of Executives' & managers' influence



Dilemma of interest (RQ1-4)

Some interviewees highlighted the challenge of working in a strategic alliance. They referred to the potential conflict of interest faced when they had to make decisions which could be favourable to the alliance but at the same time unfavourable to the parent company.

One interviewee provided a perspective on how the role of people in strategic alliances could be split in two stages, firstly in the creation of the alliance and secondly in its execution. For the creation stage it was critical to be honest and transparent in the value proposition, and that managers acted in the interest of the parent company. However, during the execution stage a conflict of interest could develop in the dilemma of acting either in favour of the parent company or the alliance. This is illustrated by the following quotation:

I think there is two phases... the creation of the venture, and then... the execution of the venture... from the management viewpoint, the involvement, the creation of the ventures is really critical... being clear and honest about whether value is being created. And I think at that point in time the managers' role is a dual role... first of all make sure that the interest of his host company is... being looked after. So this point I think there is two or more managers representing their entities towards the alliance, so you know for me at that point it's critical that the manager says: "okay, is this a good deal for my company, should we be playing in this company, in this alliance or not?"

And then balancing that with the question of well how do I manage with this other guy, if we create value and we take off all the value on the table my partner is going to be unhappy and the alliance will not be sustainable. And you know vice versa if he takes all the value it's not going to be sustainable... so I think managing those two things about the fairness of the alliance... and the individual interest of his company... alliance managers have an incredibly difficult job. And I think there is different types of alliance managers... from situations where somebody is... completely now dedicated... their career is now in that alliance. (Interviewee 1)

The interviewee also illustrated the case where a new company was created, thus managers working directly in the alliance did not face a conflict of interest:

They were completely divorced from you know their legacy... So for those managers in that particular alliance the only thing that they thought about when they woke up in the morning was the New Company [name changed by the Author]... (Interviewee 1)

However, when there was not a separate company there could be a potential conflict of interest. This arose as people in the alliance eventually went back to their host company:

In other strategic alliances... that's not the case. So the people who are managers of the alliance... are there for a term, two years, three years, four years, whatever it might be, but then they are going to go back...

But I think for a manager who is going to go back to one of the host company, one of the partners in the alliance... is more difficult. (Interviewee 1)

The quotations above show two different situations that derive from the type of structure selected. When a new organisation is created it decreases the conflict of interest for the managers involved.

Another interviewee added that to improve the nature of the strategic alliance there had to be a guarantee given to those sent to work in the strategic alliance that they would go back to their parent company. The employee would then develop a different mind set, as noted in the following quotation:

One of the real problems with strategic alliances is that... the company has to send an executive to the strategic alliance to work within the strategic alliance. And there is no way back. It's almost like it's an exit strategy... and I think one of the ways that... you can improve the nature of the strategic alliance is... giving some kind of reassurance that the executive sent to work within the strategic alliance actually have a way back into their own organisation. And I think that creates a totally different mind-set for the person that I am here and this is termed the last chance saloon. Now they are looking around for something else to do once I... leave here. So I think that is the first thing. (Interviewee 7)

One interviewee proffered the opinion that, in the end, managers had to act in the best interest of the alliance:

But I think it's imperative that... that manager is wholly dedicated to the alliance and making the alliance work.... regardless of the implication for his host company, and because that needs to be somebody else's business, so if the best interests of the alliance aren't in the best interests of the host company then a manager back in the host company needs to be responsible for that, needs to be responsible to reacting to that.

So when there is a conflict like that I think it's critical that the alliance manager acts in the best interests of the alliance. (Interviewee 1)

Another interviewee pointed out that there were two stages of influence, before signing the alliance and after it. Before signing, there was a need for an honest assessment of the strategic alliance. After signing, assessment (stop checks) was needed in order to review if the alliance was still working and to keep taking care of the relationship, and being able to understand change and how it affected the alliance, as expressed in the following quotation:

You've got two phases. Before you sign the alliance and then the alliance is in existence. The first is be honest about your interest and why you want to do it and make sure you listen to what the other party is saying. So not what you think their interests are but what they're telling you they are as well as what you think they are. So it's a proper and honest assessment of the partnership before and then once it's in, it's just doing those stop checks... The step back – is this still working – um, and relationship – but businesses are people stuff and generally a strategic alliance will involve relationships between a single figure number of people from each side... and it's just keeping the relationship alive, um, and being sufficiently emotionally aware when things are starting to change in your partners and understanding is that gonna affect this joint venture or isn't it. (Interviewee 10)

One interviewee commented that the people involved in the strategic alliance might face a conflict of interest in relation to the potential gain. However he stated that there should be an awareness that, by being in an alliance, the benefit was much greater than doing it alone. This is illustrated in the following quotation:

If you've formed a strategic alliance for a certain sector of the business while still being operational in other areas of this business where there's not that complementarity required from a partner... for example, maybe you created a different venture then obviously, the intrinsic dilemma that for this venture you are sharing with somebody else; any success, any results, etc. while if you do it on your own, you have 100% of the profits, of the benefit. So, there's an intrinsic dilemma... it's almost like the stepchild compared to the 100% owned business so perhaps on your question, what should managers and executives do. They should be aware of this intrinsic... issue in order to focus specifically on the strategies of the strategic alliance to make this successful in order to achieve something, which is that-, so that you own only own fifty percent maybe of the benefits of the result of the profit. In quantitative terms, the fifty percent of what you earn is more than the one hundred percent you would have had without having a partner in that business... (Interviewee 4)

The quotation above shows how the interests of the manager and alliance should be aligned in the search for creation of value.

One interviewee highlighted that a conflict of interest can arise at the executive level. This splits the group of executives according to their interest and their conflicts. From his perspective, there were three levels of executives - people in the business who have to be loyal to it, the shareholders and the Board of Directors in the joint venture. The Board may at some point experience a conflict because, on the one hand, they represent the shareholders but, on the other, they also represent the company. In addition, the shareholder

sometimes needs to represent himself in certain decisions, despite the fact that shareholders are represented on the Board. This is mentioned in the following quotation:

You've actually got potentially three levels of executive. You've got the people in the business who have to owe loyalty to the business not to either shareholder, you've got the ... People here, they are the shareholder... and then you've got maybe the Board of Directors in the joint venture. They're in the goo in the middle because they're representing the shareholders but they're also fiduciary duty to the company and they've got the more difficult job and I think sometimes the trick is to take hats off. Look, I think this is right for the business but I'm not sure my employer would agree so I've got a problem and that's a difficult one...

We had to sort of quarantine the middle tier when there was a conflict. Fairly rare but understanding it's that middle tier that has the – because the first and the third your duties are clear. It's the second one that has to look both ways. When things are fine, no problem, because what's in the business interest is what's in the shareholder's interest. Just occasionally.

We can't do it at the Board. It'll have to come to the Board shrink wrapped, decided, because the Board people are conflicted and re-negotiating a key contract into the joint venture. (Interviewee 10)

Another interviewee believed that a conflict of interest depended on how the alliance was structured, as noted in the following quotation:

Yes, definitely. And I – I mean, strategic alliances, sometimes they have dedicated personnel...seconded in from the parent organisations... and those personnel will inevitably... want their project to succeed, but they'll have a degree of loyalty to the parent organisation. And sometimes, you can have a conflict between... the need of the... strategic alliance, and the needs of the parent. And ultimately, I guess the – the personnel will tend to give priority to the parent's view at the end of the day. Because... depending upon the nature of the strategic alliance, they may still be employed by the parent. Certainly they may see their future as being with the parent. (Interviewee 13)

This interviewee added that structure determines obligations, for instance in a Corporation the obligations were with the Company not with the Parent:

Their legal responsibility may or may not be to the parent, depending on how the organisation is structured. For instance... if it's structured as a corporation, the strategic alliance, and you're a Director of it... then you may have obligations to that company and not to your parent.... and that can sometimes put Directors in quite a difficult situation... particularly if it's a minority parent and they are not supporting the joint venture... it can create some stresses. (Interviewee 13)

The above two quotations show the relevance and effects of the selection of certain structures for a strategic alliance. This suggests that the human factor should be considered in the process of determining the structure in order to facilitate the development of the alliance.

The chances of success increased when people in the alliance took a balanced view and there was alignment in terms of goals and interest between partners. This is expressed in the following quotation:

On the other hand... I can think of an example of a strategic alliance between a number of operators... where there were a certain number of personnel who were seconded in. But other services, specifically legal services, were... involved all of the parent organisations, and there were nine of them. And there was a remarkable degree of alignment in that particular case between the parents and the strategic alliance, which allowed an enormous amount to be achieved in a relatively short amount of time. Because there was ultimately alignment on the goal to be achieved, and there was no major – I guess, no major commercial threat to any of the parent organisations in allowing that goal to be achieved... the people who were seconded in took a very balanced view and did not favour their parent organisation, but – but tried to make the decisions that were right... for the strategic alliance. And the parent organisations... gave the strategic alliance the funding and the scope, to allow it to – so succeed. (Interviewee 13)

Degree of freedom (RQ1,2,4)

Some interviewees acknowledged that managers faced constraints imposed by their organisations. The degree of freedom to influence performance was therefore limited.

Also highlighted was that the degree of influence or power depends on each individual organisation, on the degree of freedom granted to managers to solve issues. There was also the perception that the larger the company the more formal the process. These views are expressed in the following quotations:

It depends on the company, it depends on how much authority they have to do the negotiations, how much licence you have, how much wiggle room you have... the larger the company the more formal the process tends to be... (Interviewee 3)

Of course they can, because companies are people... everything that a company does is done by people. And good people can rescue bad situations sometimes. Not always. Sometimes they're beyond saving... and good people can create the right relationships that allow strategic alliances to – to flourish. So yes, undoubtedly, within the scope of the powers given to them... employers, Managers can affect success. (Interviewee 13)

One interviewee pointed out that people in the strategic alliance depended on the processes and constraints imposed by their parent companies; therefore the needs of the alliance were decided at the parent company level:

The people in the strategic alliance team, they have one interest which is... the company or the program to make that a success but they are dependent on budgeting, on resource education, on..., whatever from their parents or from their mother company, so to say, and the guys who..., who are managing that interface, they should be aware of the fact that there's this intrinsic... ownership part of aspect and should proactively address it and make that physical so that they take the right conclusions. (Interviewee 4)

Another interviewee proffered the opinion that it is individuals which make strategic alliances work. There is therefore a need to identify people within the organisation involved whom you can trust and work with. However, when issues arose, the organisation took control over the individuals, as mentioned in the following quotation:

You have to develop a relationship, a relationship with individuals. Because from my perspective people do business with people.

So you have to be able to find someone that you can work with. And when I say you, it could be someone within an organisation, it doesn't have to be the person you most wanted to choose. So within the organisations where the partnerships, it must be individuals who trust each other enough. And get on enough to be able to work together to make that alliance workable, and enjoyable.

The issues are, another big issue, that when things go wrong, you're not dealing with individuals you're dealing with organisations against organisations. So when things go wrong, the organisation may take control and it might be out of control of individuals who might get on very well. Then things could become bitter and a bit, very formalised.

But contractually and if things go wrong it will be the organisations that take control. But when you try to set something up it's with individuals and it's maybe individuals who will make it work, or not. (Interviewee 11)

The quotations above show the tension between individual and organisation. It seems that individuals can influence performance but are constrained by the limits imposed by organisations.

Executives' role (RQ1,2,4)

Some interviewees believed that executives influenced the performance of strategic alliances in various ways - through their actions, decisions, establishing expectations and staff selection.

One interviewee pointed out that managers (Executives, in this context) had to be conscious of the challenges involved in bringing different entities together and the pitfalls around making them work, for example in keeping alignment. Otherwise, it might be better not to enter the strategic alliance. This suggests that Executives influenced the decision to enter the strategic alliance after measuring risks and challenges and is expressed in the following quotation:

This is a two way street and there is a given and take here... and if the give and take is not acceptable... today...or in the future they've got to identify that and move in a different direction. Because... you're trying to get these two entities or more than two entities to work together and if the manager don't feel that they can do that or aren't conscious that you know there is a whole other side to this equation that things have to work for them too. That they're going to get themselves into some of the pitfalls.... the alignment of... the two parties ... begin to move apart... so far as their common view of this alliance and... things just begin to separate, and it won't work. (Interviewee 5)

On the other hand, senior level Executives were expected to endorse people in the alliance through all stages. Executives also sent indications, at the alliance level, on attitudes toward working together with other parties (the halo effect), as mentioned in the following quotations:

For the Senior Managers it's quite different. I think being seen to endorse the strategic alliance and being seen to consistently endorse it, in order words, not just at the beginning but to support it and to be prepared to back it up when things get difficult, that is, you know, in, in other words, it's easy to buy into the strategic alliance and announce it and launch it, but when things come under pressure... to have visible senior support, it, it's almost more important than it is right, right at the beginning.

And I think to have behaviours at the Executive level that act as examples at the, at the alliance level can be very valuable, that you actually see the CEOs of the companies at least giving the right signals about working together... that has a filter... a halo effect on... the way that people perceive acceptable behaviours and... desired behaviours. (Interviewee 6)

The second thing is I think people working in the strategic alliance have to believe that they have the support of their... home company or their parent company... (Interviewee 7)

Some interviewees highlighted that people who were working at the alliance level could influence the strategic alliance directly. People at the parent level could also exert influence by setting the targets, metrics or via the operating mechanisms that were in place in the organisation. An example of this is in the periodic business plan reviews, mentioned in the following quotations:

[Executives can] set targets for the joint venture company, which adhere to good governance practices. Again safety records, all those aspects... (Interviewee 9)

Either do it through, setting the measurables, the targets and objectives, and making sure the reporting is against that. Or effectively as chief exec, if you say right I'm going to be measuring whatever it might be, maybe look at certain ratios, looking at market share, gain so on and so forth. Providing those are signed off and agreed by the leadership of the alliance, then you have a framework against which you can measure success... As a leader you play an awful lot with defining what success looks like. (Interviewee 12)

If you are in a strategic alliance, you influence the strategic alliance directly... if you are...in a company that has got a strategic alliance, but you're not directly part of the alliance, then you can actually – you influence through... the operating mechanisms that you have, the alliance being subject to. So you may have, let's say, a two-year and a biannual review of the opportunities, of the plans of the alliance, okay? Or the JV. So you... create operating mechanisms that tie in, dovetail to the operating mechanisms that you have in your organisations. That's the way. Because then you make it an integral part of your organisation. You can actually feed in results from one side to another side. (Interviewee 14)

As one interviewee expressed, the people directly involved with the strategic alliance could be guided by having some metrics to qualify performance and contribution to success:

Well if they're sensible they will have metrics put upon them. By the parent company or by the market whatever it's going to be. And hitting those and meeting those metrics, is a tangible measure of success. (Interviewee 12)

Another interviewee pointed out that Executives could change the people managing the alliances if interpersonal conflict arose. Decisions were made at the Executive level as to whether the strategic alliance should continue or not and the appropriate taken, as illustrated in the following quotation:

Sometimes it's good to change personnel on both sides, because sometimes it's just an interpersonal relationship that is the one that is not working. The guys have run themselves the wrong way, and from their own words, "They didn't get on... together." ...sometimes it's good to go one or two organisational levels above the guy, that the guys that are managing the day to day business and for the...for the senior guys to sit down, look at each other in the eye and say, you know, "Are we or are we not?"

"Because if we are, let's tell our guys... make it work."... "And if we're not, let's stop faffing around, and let's break this up." So, I...think it's...and the sooner you have that conversation...you cannot have it too soon because not every dispute is a reason to break up...but if things start to go really the wrong way, I think it's... good to implement any of those things quickly. (Interviewee 15)

Select the right people (RQ3,4)

Some interviewees agreed that Executives influenced the strategic alliance through the selection of the people who managed the alliance or sat on the Board. They also recommended desirable skills for employees. Further findings on skills are presented under the section 'Skills of the right people'.

One interviewee highlighted that the selection of appropriate people to manage the alliance was key to its performance. Managers working with strategic alliances required certain skills such as team building, management of problems and negotiation. The latter was key to the development of the alliance, as mentioned in the following quotation:

I think you've got to pick the right people. And I would suspect that..., only a subset of the Managers in most companies would be... good for managing strategic alliances, because it's just human nature that some people are better at collaboration than other people are. And some, some people just simply are – that they, that they enjoy working with other people, they enjoy being taken out of their routine environment, they really do enjoy... working in teams and sharing ideas and building things together. And... they're maybe not the people who are most individually driven. They're maybe not the people who would usually make the best leaders in the core of the company.

I think you, you've got to select people..., who at least have a chance of... of doing the jobs well, in that they're people who are experienced enough.... and mature enough to understand the nature of the problems that are going to arise, as well as having all the capabilities, technical, functional capabilities and experience to... do the job in relation to what the strategic alliance is... actually about.

You've got to have people whose behaviours are...going to suit them to, to dealing... with these problems. If you have, for example, people who are by nature

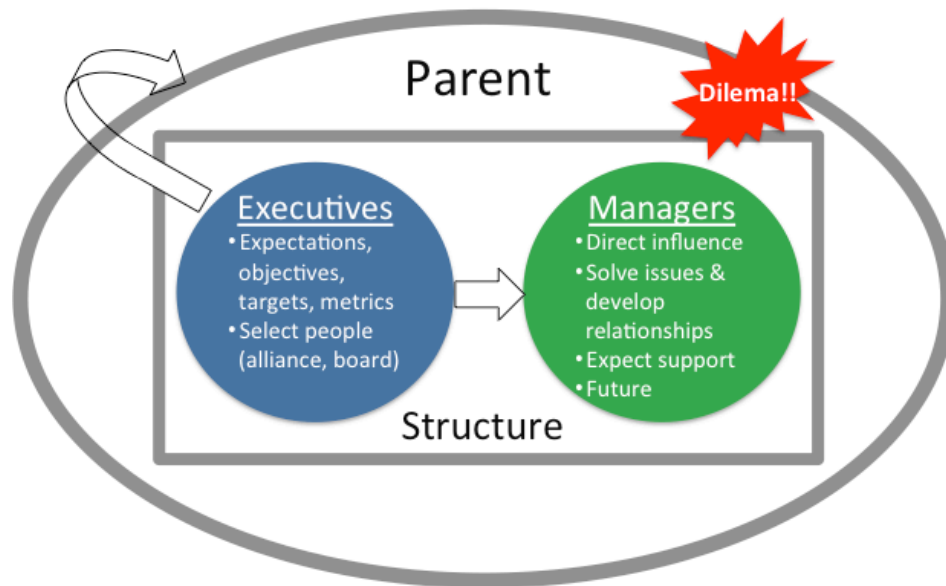
adversarial negotiators, then... you're going to have a very diminished chance that you're going to have a successful joint venture. (Interviewee 6)

Another interviewee added that Executives could influence when they selected and configured the Board. This increased the chance of success, as expressed in the following quotation:

The best way to do it is to take a couple of those people from each company and create a board of six, is the number that I like... so three from each company if it's a two way and they serve on the board of that company and act as a board of directors... And you can then work with the management, you can be in touch with what the company's plans are from both sides and communicate well across with your peers, so we're on the board for the other company, and if you pick the right people, it can be much more successful. (Interviewee 8)

The following figure illustrates findings on executives' and managers' influence.

Figure 6-5.- Executives & managers' influence



The figure illustrates findings on executives' and managers' influence. The influence of managers is constrained by the structure selected for the strategic alliance through executives and parents' policies. The arrow that points from executives to the outer oval represents the influence that executives have in the formation phase of the alliance. This is when they select the structure that later works as a constraint on the strategic alliance. Executives influence strategic alliances by setting the objectives, expectations, targets and metrics. They select the people to manage the alliance and need to look for appropriate

skillsets. Managers, on the other hand, had a direct influence on the alliance, solving issues and developing relationships to make it work. However, they expected support from executives and parent companies. One of the managers' concerns was to do with their future in the parent company. Managers faced a dilemma in terms of the loyalty that they owned to their parent company when making decisions which conflicted with the strategic alliance and they were constrained by the degree of freedom granted by their parent company.

Skills of the right people (RQ1,2,4)

As seen in the previous subsection, the interview data showed that the selection of the right people to manage the alliance was fundamental. Some of the skills already identified were team building, management of problems and negotiation. Interviewees were asked about their perception on what the profile of people managing strategic alliances should be.

One interviewee perceived that the role of managers from strategic alliances was different from that of managers within a single organisation. It therefore demanded a different skill set, as seen in the following quotation:

It's a different skill set when you're day to day working across... a strategic alliance as opposed to working within a single organisation... (Interviewee 7)

However, another interviewee pointed out that a manager of a strategic alliance did not differ from a manager in other organisations, but, interestingly, the expected skills that he mentioned were consistent with those of other interviewees:

I think it's just a good manager... because a good manager has to have clear vision, a strategic mind, ability to relate to other people, ability for conflict resolution, and all those are the characteristics that you need to have, whether leading that department or leading a JV. (Interviewee 15)

One interviewee highlighted that to influence the performance of strategic alliances required having people who were experienced in partnering, negotiating alliance contracts and budgets, as mentioned in the following quotation:

In one of the companies I work and did a lot of them... we intentionally put people in a lot of audiences to get them experience because we knew we were going to be doing a lot of them, and so we got people experienced in partnering with people who were outside that company. We get people experience in negotiating these kind

of contracts. We get people experienced in negotiating annual budgets across three different parties, and the people that we partnered with that were most successful did the same thing. (Interviewee 8)

One interviewee highlighted that people who focus on control could be good in managing the strategic alliance. However, at Board level there was a need for influencers to make things happen, as noted in the following quotation:

A control freak wouldn't be good, do you know what I mean, because your control freak wants to run something and with a strategic alliance if you're managing the strategic alliance relationship you have to use your influencing skills. There may be a CEO who's the control freak, who's running it, but if you're the Board Director you can't be the control freak because you've got – you imagine three control freaks in a room, one from each partner, and the CEO. It will fail. So you need a control freak and two influencers.

That's just an instinctive view and the interesting thing when I look back, I can see that what we had to do was, make sure that the people representing Company X [Name changed by Author] were either influencers by nature or knew that in this case that was their role and I wanted them to be a control freak in their business but the non-exec stuff they had to influence and there was a guy I remember – and actually we put him on the Board to learn the skill of influencing because you can't decide. You've got to help somebody else get to the point where you are. We want you to learn that skill. (Interviewee 10)

One interviewee reported that the development of strategic alliances across different cultures demanded very versatile people who could work with different cultures, systems and languages:

I think you've got to have someone who first of all, recognises their own culture and their own position in terms of where they are from a work place point of view. Unless you actually recognise where you are yourself, it's very difficult to work with someone who is coming from a different place.

A lot of the strategic alliance now are, truly working cross cultural or cross belief systems, across languages.

So you've got to think of people in the organisation who are willing to work in developing a new culture, or accepting some of the culture of the organisation that you've joined. So they are some of the softer issues. I think some of the harder issues that you need people moving to that organisation who firstly understand the business and understand the reason why they've gone into a strategic alliance. And they're actually able to deliver and drive for results.

So you need quite versatile people. Very well prepared in the business sense. Culturally quite in tune, so you need a combination. The IQ, and the intellectual quotient in relation to the business. But you also need the emotional quotient. You need to be able to have people who can operate in a new, potentially uncertain culture, and be comfortable in doing so. (Interviewee 12)

Another interviewee mentioned that people needed to have the ability to adapt and be flexible, as mentioned in the following quotation:

One of the key skills is the ability to work out how other organisations function, and to adjust your own normal mode of operation to fit those varying styles. And to be able to... allow for other people to continue to operate in the way that they feel comfortable... openness and flexibility is very important. (Interviewee 13)

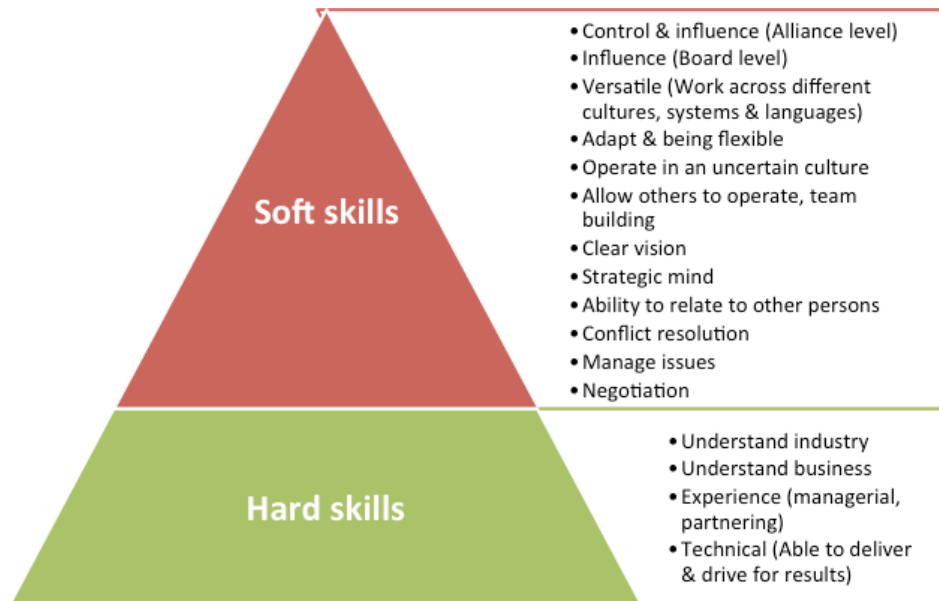
It was also pointed out by one interviewee that managerial experience - able to manage issues and having a good understanding of industry and customers - was a characteristic of strategic alliance managers. This is expressed in the following quotation:

Somebody who... is an experienced Manager. Somebody who has... understanding of solutions, and somebody who has... industry knowledge... And somebody who has got a good understanding of customers. (Interviewee 14)

The insights from interviewees provide a list of desirable characteristics for people managing alliances. This could be used as a reference in the selection of candidates.

Findings on the selection of the right people are presented in the following diagram.

Figure 6-6.- Skills of the right people (RQ1,2,4)



The findings on the selection of the right people to manage strategic alliances were classified as hard and soft skills. Hard skills included knowledge of the business and industry, experience and technical skill that allowed people to deliver and get results. Several soft skills were mentioned by the interviewees such as control and influence at the alliance level (influence was essential at the Board level), versatility in working across different cultures, adaptability and flexibility, managing uncertainty, team building, clear vision, strategic mind, interpersonal relationships, conflict resolution, managing issues and negotiation skills. It was interesting to find that the number of soft skills was sizeable. These skills provide a framework of the characteristics for people-selection.

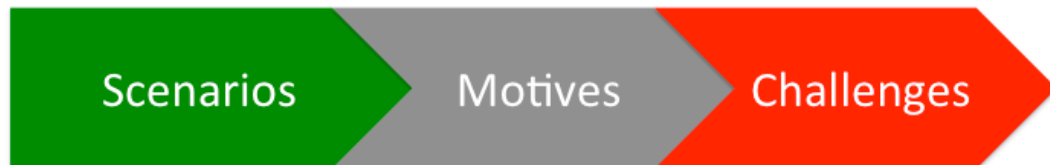
The next section presents the finding on prospects.

Prospects for the future of strategic alliances

I explored interviewees' perception of the future for strategic alliances and the challenges that they could foresee. Findings were organised under scenarios, motives and challenges as illustrated in figure 6-7 below. A majority of interviewees pointed out that strategic alliances would continue and shared their vision of the future. This was organised under the heading Scenarios. Some motives were identified: complementarity in terms of resources, financial, skills and technology, risks could continue to be an incentive, strategic and a herd

effect where perception of success could incentivise the development of strategic alliances. Cultural, financial, technological, changes, stakeholders, economic, political and legal dynamics were some aspects associated with the challenges that could be foreseen for strategic alliances.

Figure 6-7.- Categories of prospects



Scenarios (RQ1,2,4)

One interviewee described two scenarios. The first was where strategic alliances increased because of the diversity in the number of players. This came from the fragmentation of major companies and an increase in NOCs' competitiveness and internationalisation and is illustrated in the following quotation:

One driver that might make it more common to have more strategic alliances would be if you get more diversity in the players in the oil and gas business... It's not inconceivable that in the future you would actually have a... much more diverse set of private companies who are in – on average smaller if you had some kind of breakup of the, of the super majors. And then you've got the NOCs becoming... more international and growing in their competencies. And I think the NOCs are by nature a more, a more diverse group than international private companies, because NOCs are so much a function of their domestic environment, their particular domestic legacy and their domestic history. (Interviewee 6)

The second scenario was where strategic alliances were fewer because of consolidation in the industry. The internationalisation of NOCs also did not happen, as mentioned in the following quotation:

Now that's entirely speculative and I'm, I'm not sure I believe that that's any more likely than you would have a net consolidation and...that the progress towards internationalisation of the NOCs might falter, it might not carry on forever, and the international companies, it might, as happened in the past, it maybe consolidation will happen... rather than... breakups, you get consolidation. If that happened...I think the chances of getting more strategic alliances would... actually be low, you could actually have fewer strategic alliances. (Interviewee 6)

Another interviewee described the scenario where a national oil company became more international. This brought the advantage of political connections and the International Oil Company relied more on service companies, therefore questioning the role of the IOC. There were no foreseen changes at the upstream level; the drivers for the development of strategic alliances would continue in terms of complementarity and risk sharing. For midstream and downstream, the future was less obvious, as expressed in the following quotation:

Upstream is all about working with people... who've got the skills got the resources that you don't have. But the other element of it is the sharing of the risk. And you know in the oil industry that sharing of risk is very high and why you work together. Maybe in other industries it's not so high... I don't see a lot of change in the oil industry in strategic alliances or joint ventures. But I do see a change in the components. So upstream I, I think as we see the development of the national oil company beyond just being a national oil company to become an international/national oil company, I didn't see a change in balance there. I did as the oil companies... develop less and less of their own skills and rely more and more on service companies to provide skills. I think the balance will change there as well. I don't think beyond the will of man to end up in a situation where national oil companies don't deal direct with service providers... then you've got to ask yourself what the role of the international oil company is.

And international/national oil companies of course bring something else to the table that... the international oil company doesn't bring and that's political connections. So I think we will see a change or maybe it's a change in waiting but I still see things being done upstream on strategic alliance basis.

Midstream went downstream it's less obvious I think we're already seeing a shake-up between midstream and downstream. We are seeing more and more service providers. We have got a heck of a lot of refineries for example have moved away from the oil companies into I guess what we could call service providers. I see it similarly happening downstream as the oil companies get out of things like retail. They may stay in wholesale even then I'm not sure who would want to stay in wholesale other than the national oil companies. But independents we've already seen them cut back midstream and downstream. But don't see a lot of change other than as I mentioned upstream. (Interviewee 7)

One interviewee pointed out the expectation that strategic alliances would be more important, because of the advantages of partnering with NOCs:

So I see the future of strategic alliance as much, much more important than it has been in the past. In the past if you needed something you went out and you bought it... today that's getting much more difficult...

Especially given the price of the assets... You know you can't buy a field any more with oil at a hundred dollars a barrel...

So look at these companies that invested in acreage thinking that oil was going to be a hundred and twenty, a hundred and fifty dollars a barrel. Now they break even at ninety bucks. If you do a deal with a national oil company that owns the acreage, oil could go to seventy-five dollars and you could still make a margin. A strategic alliance is going to be crucial for both parties. (Interviewee 3)

One interviewee reported that there were expectations of having more collaboration among academia, service companies and operators in the North Sea, as commented on by Interviewee 13:

And that will also require collaboration between industry and academia, between different groups of service companies, and between the service companies and... the operators. So I think, we're going to see a lot more collaboration in the North Sea. (Interviewee 13)

Another interviewee forecast that strategic alliances would continue. The evolution of organisations could either promote more strategic alliances or independent companies, as noted in the following quotation:

If you look at the oil area, ... that most oil companies have radically reduced their participation in refining... So I think there is going to be... an explosion in the way that companies have disintegrated and then reformed in different strategic alliance or independent companies, and I think that is going to continue to be the case. (Interviewee 1)

Another interviewee believed that strategic alliances would continue because of the perception that they had worked well and the expectation of an increase in onshore UK exploration. Therefore there was a need to pay more attention to the interests of other stakeholders, as mentioned in the following quotation:

I think it could be more of the same because it's been working so well for so long. I think the one thing that will change a bit more is that...because it's all been a lot more, in the next ten years, a lot more onshore exploration... that means that there are a lot more attention to pay for it... I think there will be a lot more interest by the non-partners the non-operators you call it. (Interviewee 2)

One interviewee described a scenario where movement towards a decarbonised economy could encourage collaboration:

The whole move towards a decarbonised economy will require much more collaboration between organisations... This is not just in energy but the disruptive technology, digital, decarbonisation, all require skills that are generally outwith an individual company... So I think strategic alliances in many sectors are here to stay as a way of working out how we change how we do things. (Interviewee 10)

The interviewee added that the more change occurred, the more dynamics could be in

strategic alliances in the search for creating value. This is pointed out in the following quotation:

I think as technology is disrupting in the energy space and decarbonisation is disrupting, you're gonna see alliances happen and unhappen as people work out where there's value and where their core skills are. (Interviewee 10)

Another interviewee described a scenario where strategic alliances in the energy sector would become more strategic, on the one hand turning to more protectionist environments and on the other in areas with big resources moving forward. It was highlighted that there was insufficient capability to develop the resources at national level, thus strategic alliances would be required. These alliances could be driven mainly by financial and political factors unless dealing with deepwater, where technology could be the driver.

The energy sector is going to become more strategic as we go forward. As it becomes more strategic it'll become more national, more protected nationally or regionally. So one side you can see nature of alliances shifting at the protectionist nature of nations start to have an impact. On the other side the places where you've got really big sources of hydro carbons going forward, when you're looking at the shale gases, or shale oils, or deep water resources. Are increasingly areas where you don't have, where you have commons in the wide sense. So you don't have overriding regulations you have the commons of the oceans, and commons of the Antarctic. And so on and so forth. Then effectively there are going to have to be alliances to operate at that level. I think quite a few places where you have significant resources, and trying to get out. Individual nations don't have the capability nor the resources to develop them on their own. In which case you start getting this need for alliances actually grows. In those cases I think the nature of the alliance is going to be driven increasingly by financial factors, rather than technology factors. A lot of the technology is quite well known now. Deeper oceans might be a bit different, but generally the technology is known. So the formation of an alliance is likely to be more driven by politics, than it is driven by technology. (Interviewee 12)

These quotations illustrate different perceptions about the future for strategic alliances and provide drivers that can be followed in the evolution of strategic alliances. The common understanding is that strategic alliances will continue to be deployed, however, there are some different views regarding the drivers for this to occur. As part of the process of analysis, it could be useful to integrate the development of scenarios in order to create common vision among the parties involved in a strategic alliance.

Motives (RQ1,2,3)

Some interviewees highlighted the importance of motivation and drivers for the development of strategic alliances in the future. These were categorised under complementarity and risk factor, technology-access to market, strategic-market-technology, culture-market-regulation, risk, and the herd effect. I will explain these in turn.

The search for complementarity & the risk factor (RQ1-3)

One interviewee pointed out that in terms of the value chain, there is a perspective that high-risk environments favour more upstream activities. On the other hand, the search for complementarity skills and assets encouraged more midstream and downstream alliances, as commented on in the following quotation:

If my theory of strategic alliance has been... driven by activities of particularly high risk has any merit, then I guess you would expect more in the upstream than in the... downstream. But, it may well be... if the other drivers for strategic alliances are to the complementary skills and maybe complementary assets as well... perhaps you could get more... strategic alliances for the downstream, in the midstream and downstream in retail and in gas markets... (Interviewee 6)

Another interviewee believed that strategic alliances would continue as the rational to enter them in the search for complementarity would not change. This is expressed in the following quotation:

They will continue forever. They are not going to change... when I say they're not going to change around the edges we'll do things differently but at the end of the day if I don't want to buy the resource or skill that I need how else do I get it other than to work with someone who has got that resource or that skill... and I need to work with that person as long as I need that skill.

So I don't see them changing... you know they've been around forever. You know we'll just give them totally different names.

When you think about... just sitting here in Scotland and some of the earlier strategic alliances were with Scottish. We talked about the joint venture you know and in legal terms you could say a joint venture is Scottish law back beyond sixteen hundred... strategic alliances were joint adventures in those days. That type of joint venture in the fishing industry which was developed in Scotland continues to operate in numerous countries around the world today. So if it's lasted what then close to five hundred years I see absolutely no reason why it won't continue on. (Interviewee 7)

One interviewee pointed out that strategic alliances would be needed but geographic variations were expected. Some parts of the world had underdeveloped resources and

lacked certain skills and technology. This is mentioned in the following quotation:

I think it's going to vary by geography basically. Because the energy sector has been consolidating for one hundred and fifty years. My guess is that will continue. But there are sections of the world where it's not consolidated. There are sections of the world that have regional levels. There are sections of the world that need technology from other parts of the world that probably will choose to do alliances and partnerships because they just can't-, to answer your question before, they can't deal with the constraints. I mean, if I want to get into fracking in Argentina and I don't have the technology, I need to find a way to get it. (Interviewee 8)

One interviewee expected to have more strategic alliances, especially in the North Sea, with the implementation of the Wood Review. This would benefit businesses due to their interdependence in terms of infrastructure. He also referred to a kind of domino effect where the success of a venture was linked with the success of a series of ventures:

I think there will be more and more of them.

In the North Sea, I think we'll see a lot more. I think we'll see a lot of alliances between operators and one or more contractors, to develop technology around things... around decommissioning, enhanced oil recovery, and that kind of thing, and as I said, in terms of the implementation of the Wood Review, we're going to see a lot of – of strategic alliances between groups of operators, to treat holistically, interconnecting infrastructure. It makes sense and it's something that hasn't happened in the past.

Sometimes... people don't realise that... the success of their venture would be improved by the success of the series of other ventures in the area. They view those other ventures as being marginal, but they may not realise the impact of those marginal inputs into their infrastructure.

Businesses are increasingly interconnected and can benefit by working together. (Interviewee 13)

Technology-Access to Market (RQ1-3)

One interviewee highlighted that the need to combine technology, materials and knowledge could motivate the development of strategic alliances in renewable energy:

I think for renewable energy.... because you want to combine certain pieces of technology so with material knowledge, materials knowledge, which materials to use in windmills for instance. I can imagine having to combine different parties there to develop an alliance. (Interviewee 10)

Another interviewee pointed out his expectation of having more strategic alliances between NOCs and IOCs. These would be driven by needs for technology and know-how in exchange for access to market. Other factors would be the size and complexity of the projects and risk-sharing, as mentioned in the following quotation:

There is already a trend for more strategic alliances between national oil companies and successful international enterprises in which one complements the other with technology and know-how, and it's reciprocated with access to market and some local advantage. There's also already a trend for service companies to partner with each other, to target specific customers... because the projects are getting so big and so complicated...

There's also a trend to do strategic alliance to decrease the project risk, or to access technologies or know-how, to increase the probabilities of success. (Interviewee 15)

Strategic-Market-Technology- (Acquisitions & Competitive Advantage) (RQ1-3)

Another interviewee believed that strategic alliances would continue to be important as a step towards an acquisition or for competitive advantage purposes. This is noted in the following quotation:

When you look at the industry, the interesting thing is that even the big winners in the industry, they are very open to these kind of alliances and corporations... are not shying away to team up with smaller companies in fields where they are, maybe too big, too slow, not innovative enough and secure through these partnerships access to market, access to technologies, and I think therefore a strategic alliance can be and often is the first step into a later merger or acquisition scenario but for sure is a very important and helpful tool to retain the competitive advantage with the other players in the industry.

So, for me, strategic alliances..., definitely will continue to play a very important role and I think, you need to keep them in mind, as long as they are defined for some time period and then to take different decisions, either you stop activity or you acquire the company or you merge with the company then it will be a very successful model. (Interviewee 4)

Culture-Market-Regulation (RQ1-3)

One interviewee agreed that strategic alliances were going to be needed because of the benefits they provide when entering new markets and dealing with cultural differences. Partnering with a local made things easier; the local organisation brought knowledge of the market in terms of customer preferences and were au fait with the best way of dealing with different regulations. This is expressed in the following quotation:

Just like anything else just like on an individual level I think from a cultural standpoint... it's always a challenge... And it's like... an individual coming from a different country working in the group... who have a different... cultural context. The same thing can work.... in the corporate sense it can take some time... it does create one of the greatest opportunities for strategic alliances in that if you get local you know what I'd call feet on the ground which I think a lot of firms still see

in when they look outside of their you know traditional core market...

Because you know all these markets even in places like the United States in the complex there is a whole set of regulations.

And just entering at grassroots' level can be difficult. So that does hold out some promise I think for a strategic alliances. (Interviewee 5)

Risk (RQ1-3)

One interviewee expected to have an increase in strategic alliances due to the level of risk involved in the upstream, as noted in the following quotation:

Certainly in the upstream sector, I think they're growing. Because the amount of upstream activity is becoming more, and to some extent, well I think to a lot of extent has to go into riskier areas. To find upstream capability. So it's also deepwater drilling, or areas which are completely unexplored. They are riskier. So strategic alliance and forming partnerships to tackle where those areas are. I think it's going to be more so in the future than in the past to be do that. (Interviewee 8)

It was highlighted that the size of investments and risk-diversification would stimulate continued interest in alliances in the Petrochemical sector, as expressed in the following quotation:

The other aspect which has been coming for quite a while was, and I see continuing is that to reduce the risk to have joint ventures that are big investment. So ethylene crackers for instance, that you find a partner or two or which you can go in, to just diversify the risk, or reduce the risk of that investment. Commonly a scale aspect has also resulted in some of these investments are so big, that even the major companies would be looking for a partner. To just, you know not having to put all your eggs in one basket. (Interviewee 9)

The opportunity to develop strategic alliances further down the value chain in specialised areas of the chemical sector was highlighted, as mentioned below:

Where if you're working in a fairly specialised area of the chemical industry you can see how you can build value chains down the value chain. (Interviewee 9)

The herd effect (RQ1-3)

One interviewee pointed out that if strategic alliances were perceived as being successful, more of them would be expected. This is like a 'herd effect, where organisations follow actions seen to be successful. However, this was not necessarily sustainable:

It's tempting to say that there will be more of them... I think it's, it's conceivable that if strategic alliances are a visible success in places, yeah, if, if there is just one strategic alliance which shows itself to be a success or is perceived to be a success, then it's not impossible that people will try and copy the model simply because they think it's a – it there's – if they think that, that there's value to be had, that they'll

simply try and capture it themselves, so there could be a kind of a herd effect. However that's not necessarily a permanent or sustainable thing. (Interviewee 6)

The above excerpt was of particular interest because it suggested that organisations mimic each others' behaviour - a 'kind of a herd effect'.

These interviewees' insights give an interesting view of the motives to enter strategic alliances in the future. They aid understanding why strategic alliances will be developed despite their perceived level of success.

Challenges (RQ1-3)

Some interviewees identified challenges for strategic alliances. These were classified under the categories cultural-financial, technological, change, stakeholders-communities and economic-political-legal.

Cultural – Financial (RQ3)

One interviewee mentioned financial challenges from the viewpoint of strategic alliances being a way to make profit from a short-term perspective:

I mean for me the challenges are mainly... probably financial challenges with respect to the way that owners perceive strategic alliances and the short term thinking about strategic alliances as being things which are there to... harvest money quite quickly. (Interviewee 1)

Also commented that from an Asian perspective could be different towards a more long term view, this suggest difference in cultures, as expressed in the following quotation:

Strategic alliance being more driven... by Asian interests who might look at these types of things and say... actually if we can see good industrial logic, and that good industrial logic is going to pay us back in you know decades rather than in a few years or quarters then we will go for that. (Interviewee 1)

The quotations above demonstrate that cultural aspects could add tension due to the difference in performance expectations in strategic alliances. As part of the process of developing alliances, organisations need to discuss and agree common expectations in order to decrease this tension.

Technological (RQ1-3)

One interviewee thought that strategic alliances would continue to be a hot topic, especially because of the size and technological challenges of projects and also as an alternative to

growth:

I saw a lot of these... this is going back fifteen/twenty years ago, it was a very, very hot topic. I think in some parts of the energy sector it still will remain that way. I think especially when it comes to co-development, because the projects are getting bigger and bigger or more technologically challenging. And it will continue to be the key weapon for a company is to you know to go out and grow their businesses. (Interviewee 5)

Other interviewees pointed out that, in the downstream, strategic alliances were perceived as a necessary evil, especially in technology. Also highlighted was the perception that a portfolio of strategic alliances was difficult to manage, as mentioned in the following quotation:

So far as the interaction and closer to the kind of the area where I work mostly now which is in the downstream. If anything I've seen some disillusionment with how some of these alliances and partnerships work... sometimes they are a necessary evil especially in the case of access to technology or things like that. But so far as operating relationship they've been perceived I think as no longer the necessary evil in that sometimes you have to do it because you really don't have any other recourse.

But I think nowadays a lot of managers are really quite wary of them. I think there was probably a little bit more optimism about them in the past years than there is now. I believe that is what I perceive in the downstream.

And I know a number of leading firms you know they have a number of these types of relationships and... basically they would like to reduce the number that they have sometimes because they are hard to manage. (Interviewee 5)

Change (RQ2)

One interviewee highlighted disruptive change as a challenge in the future, not only for strategic alliances but also for the energy industry:

Well disruptive change, which is what I think the industries are going through, the last fifteen years and the next fifteen years, is a challenge and it means that some strategic alliances that are absolutely the right thing to do today won't be tomorrow because something will change and it's no different than, you know, some – if you had in the UK a business building coal fire power stations you got disrupted in the early two thousands when the Kings North protest meant that it wasn't possible to build a new coal fire power station. It doesn't matter if you were in an alliance or in the individual company, that disruptive change happened and I think that's gonna be true but I don't think it's particularly prevalent in alliances. It's just true of the energy industry. (Interviewee 10)

Stakeholders – Communities (RQ2,3)

One interviewee pointed out that license to operate would be one of the main challenges. There could be a greater number of alliances in countries where licenses were determined more by the Government than by the markets – for example, in China, South Korea and Russia. This is commented on in the following quotation:

The licenses to operate, the agreement of society to allow energy companies to operate is going to be a significant factor going forward. That might be that countries where the license operators are more determined by a government statute than markets will have a significant advantage in forming energy alliances going forward.

Where you choose to operate will have an increasingly large social factor, compared to the past.

But I think we're going to have a bit of a bell curve, where people are very vocal around energy activity and energy alliances. Where the choice exists and they're still going to get the energy they want. As soon as we start getting to a point where you have electricity brown outs, or shortage of diesel and gasoline and so forth. I think a lot of those social issues will actually disappear. Because we are so dependant on this energy.

So I think ten to fifteen years, or twenty years the licensee to operate issues will be very significant. And then after that just getting hold of the energy is going to be the driving force. (Interviewee 12)

Economic, Political and Legal (RQ2,3)

One interviewee pointed out that the oil price could represent challenges in the allocation of rewards, but at the same time this could encourage the development of strategic alliances in the search to reduce costs. There would be competition of investment amongst regions with political constraints as seen in the issues with Russia and anti-trust hurdles. This is expressed in the following quotation:

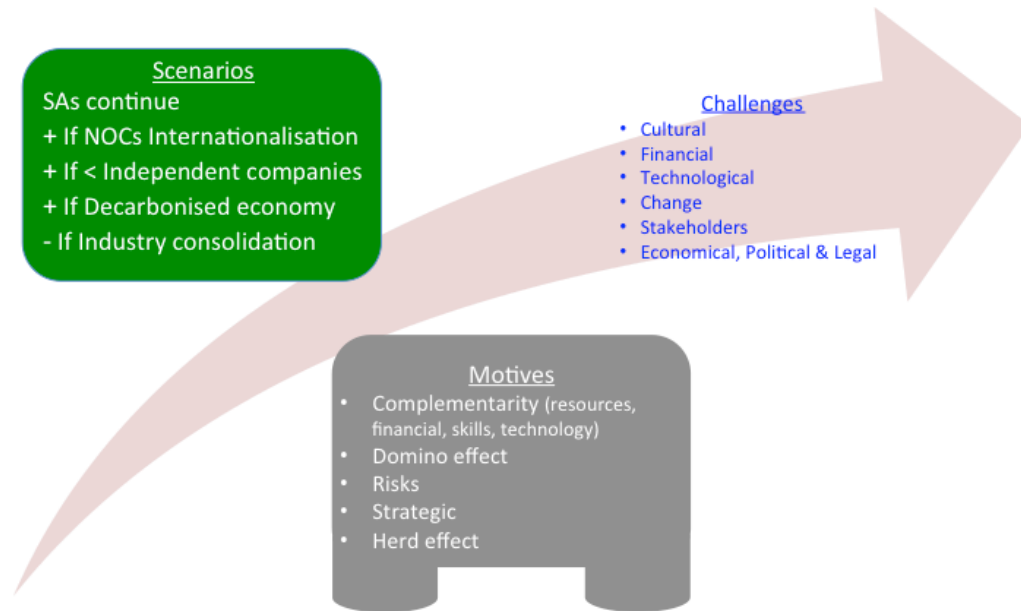
If the oil price falls, that's going to put pressure on cost, and that's going... to make it harder to develop a strategic alliance that gives everyone some reward... on the other hand, you could say that the fact that costs are increasing and oil price falling is precisely the time where you need a strategic alliance to work out how to do things better going forward and cut costs.

There's the competition for investment capital... which means... you've got to show that... this is the right place to invest. I guess there will be new political shocks that we haven't anticipated, along the lines of the current Russian problems, and there'll certainly be a lot of anti-trust hurdles to jump through. (Interviewee 13)

The above quotations provide an interesting perspective on the challenges facing the energy industry. Oil prices could encourage the development of strategic alliances as a way to

optimise resources. Communities are increasingly playing a more important role in the development of natural resources, it seems that the dynamics of the process for the development of strategic alliances requires a continuous monitoring and analysis of these challenges.

Figure 6-8.- Prospects of strategic alliances



The above figure represents the different views of interviewees, where the consensus of opinion was that strategic alliances would continue. The motivation would be complementarity - searching for feedstock, financial resources and skills technology. There was a perception that in the North Sea the success of a strategic alliance was dependent on the success of other alliances -a 'Domino effect'. Other motivations included risk-sharing, strategic and the 'herd effect'- if an organisation was perceived to be successful in a strategic alliance, this could encourage other organisations to follow suit. Interviewees referred to future challenges that strategic alliances could face, such a, cultural, financial, technological, change, stakeholders, economic, political and legal.

Conclusions

This chapter offered a set of interesting findings, which are helpful to improve understanding of strategic alliances. The findings provided an insight, from the perspective of interviewees, on how external influences impose constraints on the development of strategic alliances. This occurs by enforcing certain terms but at the same time encouraging development. This can be observed in the case of governments or the configuration of the market. Sometimes governments act to enforce partnerships with national companies. This dual role is also acknowledged in the literature.

The findings on internal influence from the perspective of the role of Executives and Managers allowed me to identify the dilemma of interest faced by those involved in the alliance. Parent companies impose constraints on the degree of freedom granted to Executives and Managers. However Executives influence the degree of freedom granted at the initial stage when the structure of the alliance is designed. The literature studies the challenges that managers face in terms of loyalty and the constraints imposed by the parent companies.

The findings related to prospects offered a view of the future for strategic alliances. Although there was some difference in the individual perceptions of interviewees, there was a general consensus that strategic alliances will continue. This assertion is confirmed in the findings of both chapter 5 (performance) and chapter 4 (concept and process). Mimetic behaviours in the development of strategic alliances were identified in the findings. This issue has been studied in the literature - the perception of success could encourage the development of strategic alliances. Scenarios-development could be integrated into the process of strategic alliances to create common vision and understanding. These findings will be further explored in the Discussion chapter following.

The findings chapters presented the five elements and sub elements of the holistic process model - Chapter four: Concept (meaning of strategic alliances, types, motives), Process (decision to enter strategic alliances, partner selection, alliance portfolio); Chapter five: Performance (measurement, problems, critical factors, risk, success and failure); Chapter

six: Influence (External, and Executives & Managers influence) and Prospects (Future, and challenges). The holistic process model is presented in the following chapter.

CHAPTER 7 ‘DISCUSSION’

Introduction

This chapter will interpret and critically evaluate the findings in previous chapters in the light of my literature review. It will begin by revisiting the research purpose and questions and will summarise key findings. I will then analyse these findings in light of the literature and theoretical framework as discussed in earlier chapters. I will conclude with the research’s contribution to theory and practice and include suggestions for further research.

Research purpose

The aim of this research was to gain an in-depth understanding of the performance of strategic alliances in the energy sector. This would be achieved by drawing on a comprehensive qualitative study of the perspectives of those involved.

The following research questions (RQ) were posed in Chapter 3 ‘Methodology-Methods’:

- RQ1: How and why have strategic alliances been developed in the energy sector?
- RQ2: How and why do strategic alliances succeed or fail?
- RQ3: Why do firms engage in strategic alliances despite low success rates?
- RQ4: How can we create more effective strategic alliances in the energy sector?

The findings have been presented in the previous three chapters. The cumulative contribution of each chapter demonstrates that the research questions have all been addressed. However, chapter four ‘Concept and Process’ focussed more on RQ1; chapter five ‘Performance’ was balanced between the four RQs, and chapter six ‘Influence and Prospects’ contributed more to RQ1.

Summary of Key Findings

In this section I will summarise the key findings of my research. Key findings refer to the concepts or themes that emerged from the data analysis and that contribute to advance the knowledge and improve the understanding of strategic alliances in the energy sector. I will explore how these findings are similar to or are different from other research in this field in the following section. Table 7-1 below summarises these key findings, It is organised in four columns: location, key findings, connection and reflections. ‘Location’ refers to the section in the findings chapter where greater detail can be found. ‘Key findings’ develops a brief narrative; ‘Connection’ establishes a link between the key findings and the existing literature; and ‘Reflection’ briefly comments on the contribution of the findings.

Table 7-1.- Key findings of the research

Location in thesis	Key findings	Key topics in findings	Connection with literature	Reflections on the connections
Concept				
Meaning of strategic alliance (Ch4)	Diversity was found in the meaning of strategic alliance, different interpretations, and the relationship between meaning and performance. Diversity through different understandings suggests complexity of strategic alliances.	Diversity Performance Complex	Same diversity (Anderson 1990, Kale and Singh 2009, Christoffesen 2013, Porter 1986, Contractor and Lorange 1988, Nippa 2009, Oliver 1990, Glaister and Buckley 1996)	Relationship between meaning and performance
Types (Ch4)	Dynamics of alliances at other levels (industry, country) and their effects on performance at the micro level. The concern over flexibility, degree of freedom and the selection of the type of strategic alliance, suggesting a dilemma over these elements. The development of pilots as a way to build trust.	Other levels, flexibility & trust	Share concern over flexibility and degree of freedom (Das and Teng 1999)	Explore strategic alliances at macro-meso level and effects
Motives for strategic alliances (Ch4)	Theories could explain the motives that were identified. Strategic alliances are perceived as costly and complex; therefore there should be certainty when entering a strategic alliance. The energy industry is characterised by sharing risks, capital costs and by being influenced by governments because of the sensitivity over resources.	Complex, share risk and capital. Sensitivity over resources and government's influence	Same theories could be useful to explain the motives of findings (Pfeffer and Salancik 1978, Arndt 1979, Williamson 1981, Kogut 1988, Oliver 1990, Barney 1991)	Explore patterns of different governments and influence over natural resources from a soft perspective

Location in thesis	Key findings	Key topics in findings	Connection with literature	Reflections on the connections
Process on decision to enter strategic alliances, select partners and manage a portfolio				
Decision to enter a strategic alliance (Ch4)	Diversity to make decisions to enter a strategic alliance, formal to informal processes, sometimes assisted by externals to legitimise decisions, this could suggest some issues around trust. Some elements between size of organisations and flexibility to accommodate change. The energy sector perceived to be more relevant for the economies of countries than other industries. Internal conflicts (not invented here). The need for senior involvement along the life cycle of the strategic alliance.	Diversity Legitimation and trust. Rigidity, flexibility and change Energy sector relevance	Framework for strategic options (Devlin and Bleackley 1988)	Flexibility in the process to accommodate contexts and internal conflicts (not invented here)
Partner Selection (Ch4)	Context, hard and soft characteristics. Energy scientific background in the industry tends to look for hard characteristics.	Energy scientific background and soft elements		Background of industry and soft considerations.
Portfolio of alliances (Ch4)	Diversity in the management of portfolios. Tools to manage portfolios	Diversity	Strategies to manage portfolios (Wassmer 2010)	Some insight into tools to manage portfolios
Measurement of performance				
Measurement of performance (Ch5)	Measurement of performance is difficult, diversity of metrics to deal with uncertainty and change and context. There is a need to include soft metrics (culture) and stakeholders' preferences to measure performance.	Complexity and stakeholders' preferences	Multi-constituencies approach, include stakeholders' requirements (Ariño 2003)	

Location in thesis	Key findings	Key topics in findings	Connection with literature	Reflections on the connections
Problems, risk, critical factors, success and failure in strategic alliances				
Partner related issues (Ch5)	Critical for success, capabilities or risk of default, more partners more complex, vested interest -trust, value creation a benefit of partnering despite high levels of tension and conflicts (highland game week), but complex, win-win mind-set	Trust Complex	Partner and trust, capabilities and risk, more partners more complex vested interest and opportunistic behaviour. Complexity of partnering (Killing 1988, Makino and Beamish 1998, Das and Teng 1999, Das and Teng 2001, Beamish and Kachra 2004, Beamish and Lupton 2009)	Trust and opportunistic behaviour. Skills of managers to deal with more partners
Alignment (Ch5)	Differences in sizes and rewards, risk approach and the influence on the decision making process. A need for continuous alignment is critical for success.	Change	Dissimilarities among partners (Lowen and Pope 2008; McCutchen et al. 2008; Park and Ungson 1997; Saxton 1997; Yeheskel et al. 2001), inequity (Bleeke and Ernest 1991, Das and Teng 2001)	
Change (Ch5)	Flexible documentation, to accommodate change, the industry is subject to a high level of volatility, plan for exit. Failure could be a perception. Change is complex for organisations. Need for executive endorsement.	Flexibility Failure perception. Change is complex. Executive endorsement	Flexibility in documentation and trust. Failure is subjective (Das and Teng 1999, Van de Ven and Walker 1984, Gomes-Casseres 1987, Ring and Van de Ven 1994, Cristoffersen 2013)	Change is complex. Connection with trust. Failure subjective

Location in thesis	Key findings	Key topics in findings	Connection with literature	Reflections on the connections
Exit (Ch5)	The need to plan and agree on exit. An alternative to change. Exit is difficult if everything was committed to the strategic alliance.	Plan exit. Change	Plan for exit (Das and Teng 1999, Gulati et al. 2008)	
Legal regulatory (Ch5)	Strategies to protect knowledge and IP, an implicit connection between growth and trust. Strategies for protection suggests a lack of trust	Growth and trust	Strategies for protection (Bleeke and Ernst 1991, Ring and Van de Ven 1994)	Balance between trust and objectives of organisations to growth
Culture (Ch5)	Working in different cultures and a process of change of organisations that it is critical, therefore leadership and skills to manage change are critical. Behaviour related with difference in culture impact trust. Similar cultures and pilots to develop trust. Big companies are more rigid; flexibility could be an advantage when dealing with different cultures.	Process of change, impact on trust. Flexibility is an advantage	Culture (Hofstede 1980, Ring and Van de Ven 1994, Dacin et al. 1997, Makino and Beamish 1998, Callahan and MacKenzie 1999, Glaister and Buckley 1999, Beamish and Kachra 2004, Makino et al. 2007, Kale and Singh 2009, Kim and Parkhe 2009, Meier 2011, Cummings and Holmberg 2012, and trust (Robson 2002, Nippa et al 2007, Jiang et al 2008, Kale and Singh 2009, Ren et al 2009, Gulati 2012, Albers et al., 2013. Christoffersen 2013)	

Location in thesis	Key findings	Key topics in findings	Connection with literature	Reflections on the connections
Clarity (Ch5)	Critical for success, clarity facilitates alignment.	Critical for success. Alignment		
Stakeholders (Ch5)	A long-term perspective and the governments' influence and political risks. The increasing relevance of communities in the development of strategic alliances	Long-term perspective, governments' and communities influence	Stakeholders relevance and alliances with them (Kale and Singh 2009)	
Trust (Ch5)	Lack of trust at early stages of the strategic alliance could derive in failure. Trust was not frequently mentioned, but emerged as a relationship with other categories.	Trust and failure	Various connections of trust (Robson 2002, Nippa et al 2007, Jiang et al 2008, Kale and Singh 2009, Ren et al 2009, Gulati 2012, Albers et al., 2013. Christoffersen 2013)	Even if it is not explicitly mentioned, trust is connected with several categories of performance. Trust facilitates adaptation to change
Leadership (Ch5)	Leadership is critical to manage different cultures, stakeholders' interests, align organisations and provide clarity to strategic alliances.	Critical	Not too much information	Connections with alignment, clarity, culture and stakeholders
Influence: external factors, executives and managers, and skills of managers				
External influence (Ch6)	Dual role of the government and markets, encouraging strategic alliances and at the same time constraining terms and conditions. If strategic alliances are imposed there could be some constraints for the partner selection, how does this influence performance? Political constraints in the form of sanctions	Influence of governments and markets, the impact of performance	Acknowledgement of the dual role (Arndt 1979, Porter 1986, Gomes-Caseres 1987, Contractor & Lorange 1988, Das and Teng 2001)	Enforcement of partner selection and impact on performance

Location in thesis	Key findings	Key topics in findings	Connection with literature	Reflections on the connections
Internal influence and skills of the right people (Ch6)	The choice of governance, the flexibility of the selected structure and degree of freedom for managers of strategic alliances. The dilemma of interest of managers, their concerns over loyalty and future career. The executives' role and the right skills of people to manage strategic alliances.	Flexibility, governance, degree of freedom. Loyalty and future. Executives' role. Right skills of people	Role of conflict, loyalty, trust, and freedom required to manage alliances (Killing 1988, Bleake and Ernst 1991, Ring and Van de Ve 1994, Fraine and Geringer 1995, Li et al. 2002, Robson 2002, Glaister et al. 2003, Nippa et al 2007, Jiang et al 2008, Kale and Singh 2009, Ren et al. 2009, Gulati 2012, Albers et al., 2013. Christoffersen 2013, Reuer et al. 2014)	
Prospects for the future of strategic alliances				
Scenarios (Ch6)	Strategic alliances will continue, role of NOCs and communities would increase	Continue, NOCs and communities	New forms of cooperation to understand stakeholders requirements (Kale and Singh 2009)	How does the future influence decisions of strategic alliances in the long term?
Motives (Ch6)	Rational to enter strategic alliances was perceived to continue. Mimetic behaviour if perception of success but this is not sustainable	Mimetic behaviour	Mimetic behaviour (DiMaggio and Powell 1983, Das 2001, Pfeffer 2003)	
Challenges (Ch6)	Change and stakeholders	Change		

Key findings show that the attributes of the energy industry are perceived to be key in its differentiation from other industries. The energy industry has a greater impact on national economies. Governments are therefore sensitive about the control of natural resources and try to impose a greater influence over the decisions on how to develop these resources. This ultimately impacts strategic alliances. The predominant scientific background of those in the industry creates an approach that favours the ‘hard’ elements in developing strategic alliances. However, there is also a need to consider ‘softer’ elements, such as the characteristics of partner selection and performance measurement.

When exploring the meaning, types, processes, and measurement of strategic alliances, the common elements are: diversity in the way people understand strategic alliances, how they make decisions and how alliances are managed. This suggests that dealing with strategic alliances is a complex task. This is mainly due to more than one organisation being involved, each with different ways of working and individual cultures and also as it is within a dynamic environment where change is a constant. In a volatile energy industry, changes in markets impose serious challenges for the development of strategic alliances. There is therefore a need to provide tools and provide solutions to accommodate change. This could be achieved, for example, by providing flexibility to the agreements among partners. Complexity becomes greater when managing a portfolio of alliances; therefore tools that can support the management of complexity are required.

Performance measurement is complex and diverse; various metrics within a combination of hard and soft could be considered. Partner selection, continuous alignment, how to deal with change, plan for exit, strategies to protect knowledge and intellectual property rights, managing different cultures, clarity and a win-win mindset, considering the stakeholders’ voices, and building and maintaining trust are all critical factors that affect performance. Leaders that can face the challenges of developing strategic alliances and provide support to manage them are required. Failure of strategic alliances could be based on a subjective perception of performance.

Governments and markets play a dual role in relation to strategic alliances. On the one hand they can enforce the development of strategic alliances as a way to access specific countries, and on

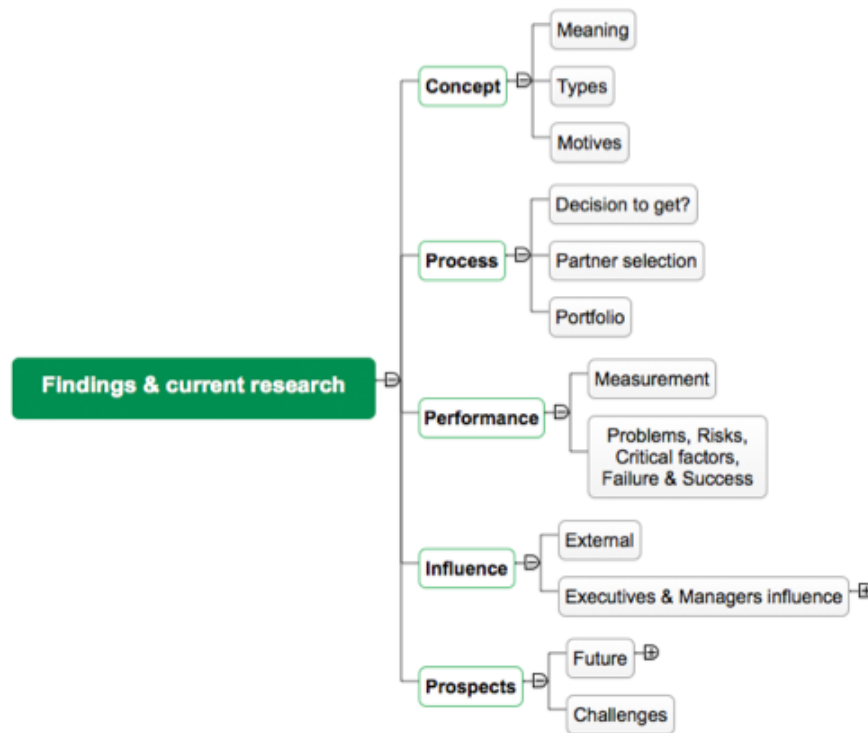
the other they can impose stringent requirements on developing strategic alliances developing within their province. Managers of strategic alliances face a dilemma over loyalty to the parent company and have some concerns over the future of their career. They expect support and endorsement from executives but at the same time require flexibility to manage the strategic alliance. This could be constrained by decisions made at early stages in selecting the type, structure and governance. Managers need to have particular skills to accomplish their endeavour.

The prediction for the future of strategic alliances is that they will continue and the role of national oil companies and communities in their development will increase. Current motivation to enter strategic alliances could carry on. The perception of success in strategic alliances could create mimetic behaviours in organisations by following the trend in developing strategic alliances. However, questions arise over sustainability. The main challenges are concerning how to deal with change and stakeholders' influence (mainly communities) in the development of strategic alliances.

Findings and existing literature

In this section, I will elaborate on the connections between the key findings and the existing literature. These are presented in the same sequence as the chapters on findings and are illustrated in the following figure.

Figure 7-1.- Structure of section findings and current research



The structure above illustrate the elements and subelements that are part of the holistic model proposed in this thesis. It is presented in the contribution section of this chapter.

Concept of Strategic Alliances

Concept is the first element of the holistic model proposed and is divided into meaning, types and motives for strategic alliances.

Meaning

Interviewees constructed the term ‘strategic alliances’ in a variety of ways. Some interviewees acknowledged as being it a broad concept; this reflects the same diversity that was found in the literature (Anderson 1990, Kale and Singh 2009, Christoffesen 2013, Porter 1986, Contractor and Lorange 1988, Nippa 2009, Oliver 1990, Glaister and Buckley 1996). The breadth of the concept implies subjectivity in the meaning of strategic alliances. This could lead to different

understandings among the organisations involved in any single alliance and the heterogeneity gives a sense of uniqueness and complexity. Anand and Khanna (2000) acknowledged this complexity by describing alliances as ‘complex organisational forms’ (p. 295). There is, therefore, a challenge to anticipate issues whilst managing them. Bamford et al (2003) acknowledged the variability and complexity of strategic alliances and recommended reaching agreement on the meaning of success, failure and performance measurement on a case-by-case basis.

The diversity and complexity in the meaning of strategic alliances highlights the need to develop a common understanding when developing an alliance. This justifies integrating as part of the process of analysis to promote conversations amongst those involved in the alliance to reach a common view on meaning in order to align behaviours and actions.

Types

The majority of interviewees’ description of the various types of strategic alliances was consistent with the descriptions in Das and Teng (2001). Some interviewees acknowledged of the development of strategic alliances beyond the organisational level to an industry level opens an avenue to consider the wider spectrum where strategic alliances are developed. This relates to institutional logics where strategic alliances can be positioned at the micro, meso and macro level (Thornton and Ocasio 1999). Gulati and Westphal (1999) suggested that relations at the industry level promote and facilitate ties - organisations get to know or recommend others through their continuous relationships.

Some interviewees highlighted that the selection of the type of structure is influenced by the strategic objectives, the legal compliance and requirements. Some authors acknowledged this, for example (Porter 1986). One important element that emerged is the consideration that the selection of the structure is also influenced by an expected degree of freedom for the operations of the strategic alliance. Das and Teng (1999) raised this concern in terms of searching for the right balance between rigidity and flexibility in the structure. Another aspect that emerged was the perception of having freedom in structure selection. This points to the degree of influence of

the individual over the organisation and suggests looking at this in the light of institutional theory, institutional logics and some issues around agency theory.

Motives

Motives recalled by interviewees can be mapped against the theories reviewed in chapter three, Literature Review to explain the drivers for organisations to enter strategic alliances. These are: domesticated markets, market attractiveness and organisational power, interorganisational exchange behaviour and resource dependency, institutional economics and the resource-based view.

Categories that emerged from the findings (see Chapter 4, section ‘Motives’) can be accommodated within the theories of motives reviewed within the literature (see Chapter 3, section of ‘Theoretical explanations of motives for entering strategic alliances’), as illustrated in the following table.

Table 7-2.- Motives in findings and theoretical fit

Findings’ categories		Theoretical fit				
		DM	MA& OP	IEB &RD	IOR	RBV
Complementary	<ul style="list-style-type: none"> • Skills & knowledge • Resources (people, capital) 			X	X	
Access	<ul style="list-style-type: none"> • Markets • Technology • People • Feedstock • Knowledge 	X	X	X	X	X
Strategic	<ul style="list-style-type: none"> • Pre-emption • Exit • Acquisitions • Credibility 		X			
Risks & capital	<ul style="list-style-type: none"> • Share • Diversify 	X	X		X	X
Positives & Negatives	<ul style="list-style-type: none"> • Opportunities • Solve problems • Defensive 		X			

	<ul style="list-style-type: none"> • Survival 					
Value chain	<ul style="list-style-type: none"> • Upstream-feedstock • Refining-exit strategy • Petrochemicals-new markets or technology 	X	X	X	X	X

* DM= Domesticated Markets, MA&OP= Market Attractiveness and Organisational, IEB&RD= Interorganisational Exchange Behaviour and Resource Dependency, IOR= Interorganisational Relationships, RBV= Resource Based View

Motives to enter strategic alliances could be explained by different theories, as shown in the previous table. The theoretical fit confirms that findings could be connected with more than one theory. This was demonstrated by the motives expressed for entering strategic alliances as identified earlier in the literature review.

One of the findings was related to the perception of strategic alliances being complex and costly. Entering a strategic alliance, therefore, requires that the benefits outweigh the costs. Das and Teng (1999) argued that the difficulty in managing strategic alliances stems from the fact that, besides managing one's own organisation, involvement in a strategic alliance means you additionally have to deal with the partner's organisation. Also, from a control viewpoint, entering a strategic alliance is perceived to have a high level of risk because a parent company has less control of the alliance than of its own subsidiaries.

Some interviewees mentioned sharing risk and joint capital investment as motives in developing strategic alliances. From a resource view perspective Das and Teng (2001) argued that, by sharing risks through strategic alliances, organisations are better equipped to face the uncertainties and risks of the environment. This explains the dynamics in the oil industry since its origins, where alliances were created in order to share the risks (Pfeffer and Salancik 2003) and to accrue capital to develop complex and challenging projects. This is evident in the case of oil majors, as shown in the 'Introduction' chapter, for companies such as Shell.

The motives that emerged from the findings and the theoretical fit enlightens our understanding (from both a practical and a theoretical perspective) of the reasons for the development of strategic alliances, despite their level of perceived success.

Process of Strategic Alliances

Process is the second element of the holistic process model. This advances understanding on how organisations follow process to decide to enter a strategic alliance, select a partner and develop alliance portfolio.

Decision to enter a strategic alliance

Some interviewees described the business options prior to entering a strategic alliance are similar to those described by Devlin and Bleackley (1988) as strategic options. One main difference is that, while 'Findings' included an option of doing nothing, Devlin and Bleackley did not consider this. They did, however, include divestment as an option.

Diversity was found among the descriptions of the processes to enter strategic alliances, with some differences in terms of formality. It seems that the bigger the company the more formal it is, which could be explained by levels of bureaucracy. While describing the process in deciding to enter a strategic alliance, some interviewees mentioned bringing in external people (consultants) to support the decision. This seems to provide some insight as to how organisations legitimise their decision-making and also implies issues around trust. Dacin et al. (2007) defines legitimacy as 'the extent to which a firm's structures and activities appear to conform with social norms, values, and expectations of the firm's economic and social environment' (p. 171). In this sense, and as expressed in the interviews, sometimes consultants were brought in to legitimise decisions, even if the organisation had the capability to make the decision itself.

According to one interviewee, strategic alliances in the energy sector are perceived to be different from those in other industries because of the importance of natural resources. In line with these findings, Duval et al. (2009) claimed that, from a global perspective, petroleum resources are a matter of national or public interest.

Some interviewees highlighted the need to keep the strategic fit by having continuous tuning and adjustment during the strategic alliance. This reflects the natural dynamics of evolution and

change in a strategic alliance, and the need to have a dynamic process framework. This framework can be useful in monitoring and identifying changes in the environment and to adjust decisions and take action during the life cycle of the alliance.

Partner selection

The topic of partner selection as a relevant part of the strategic alliance process was explored with interviewees. The majority of interviewees confirmed its relevance when discussing the problems and critical factors associated with performance. The findings of partner selection both as a process and as a subcategory in performance emerged; both are presented here.

One interviewee believed that the scientific background of the energy industry influences the characteristics desired when selecting a partner. A science-based rationale for partner selection was not found in the literature.

Some interviewees identified partner selection as critical for success. Consistent with this, Dacin et al. (2007) argued that partner selection is critical to alliance performance. He also acknowledged that partner selection required understanding the needs, motives, and expectations of the partners and that there was little research on partner selection. Gomes, Barnes et al. (2014) suggested that selection of partners was an area of particular interest to research.

Some interviewees highlighted that previous experience in undertaking alliances was acknowledged as a positive characteristic. In line with this, Cristoffersen (2013) found a positive correlation between prior relations or experience between partners. This contributes to understanding resources and capabilities through previous experience. Trust-building is facilitated by the knowledge that they accrue from each other. This highlights the connection between partner selection and trust.

Insights from interviewees suggested identifying a set of desirable characteristics of a partner where, surprisingly, soft characteristics are highly valuable. This set could inform the analysis when selecting a partner in the development of strategic alliances.

Portfolio

The responses of the majority of interviewees reflected the diversity of experience in managing a strategic alliance portfolio. These highlight, a concern to build the capabilities of the people involved, and, the relevance of taking advantage of the learning process. Knowledge dissemination among employees involved in the strategic alliance is essential to understanding the benefits of these partnerships to the portfolio. In line with these findings, Gulati (1998), departing from an embedeness approach, claimed that organisations able to manage a portfolio of alliances could develop a competitive advantage. He identified a series of desirable capabilities in managing a portfolio, such as: ‘identifying valuable alliance opportunities and good partners, using appropriate governance mechanisms, developing interfirm knowledge-sharing routines, making requisite relationship-specific asset investments, and initiating necessary changes to the partnership as it evolves while also managing partner expectations’ (p.308).

Kale and Singh (2009) identified three essential elements that favour portfolio alliance management: previous experience in alliances, having an organizational unit coordinating the alliance function, and enhancing the know-how and skill in alliances. The authors found that an organizational unit dedicated to the alliance function increases the chances of success.

The majority of interviewees showed that there are different perceptions on how to organise or configure a portfolio of alliances. The portfolio could be organised geographically or, as in the case of oil and gas companies, in operating or non-operating assets. Organisations should be aware of the competition for resources among alliances in a portfolio and threats to the core business of an organisation. In line with this finding, Hoffman (2007) suggested looking carefully at the individual purpose of alliances and the potential overlap of benefits. This area causes rivalry within alliances. Hoffman added that the configuration of an alliance portfolio depends on both the level of resources of an organisation (technical capital, commercial capital, and social capital) and on the strategic uncertainty as perceived at executive level, and its related strategic decisions.

Some interviewees offered insight on the different tools used to manage a portfolio. These include risk analysis compliance in order to verify the accomplishment of standards of alliances within a portfolio, and audits, which contribute to the need identified by Wassmer (2010) of providing tools to manage alliance portfolios.

In their review, Lahiri and Narayanan (2013) found that the size of the alliance portfolio could have both positive and negative effects on performance. The benefits are that knowledge and information can be exchanged among alliances. However challenges occur if more alliances are added to the portfolio. Managers may perceive that diminishing returns accrue as more alliances are added to the portfolio. In addition, managers employ selectivity in demonstrating preferences across the portfolio in identifying priorities. The literature suggests that alliances not only compete for economic resources but also the time to manage the alliance and the distraction of the more attractive alliances. Responses from some interviewees showed concerns about competition amongst alliances in a portfolio.

From the reflections of the process approach, advancement in the conceptualisation of the development of strategic alliances is to integrate as part of the process the analysis of alliance portfolio, as presented in the holistic model in the contribution section.

Performance

Performance is the third element of the holistic model presented in the contribution section of this chapter. Its sub elements are measurement and the findings on problems, risks, critical factors, success and failure. This section follows the same structure as the findings chapters. More details of these findings are presented in chapter five.

Measurement

Findings from some interviewees showed that the measurement of performance was complex. This perception is consistent with the literature. Dussausage and Garrete (1995) contended that defining and measuring performance was a complex endeavour.

Findings from some interviewees showed that setting metrics for performance required considering the perspective of financial institutions or shareholders. However, this could also be extended to other stakeholders. Ariño (2003) suggested a multiconstituencies approach in order to include the assessment of stakeholders - for example each partner, community, and also host governments in the case of a cross-border strategic alliance. In her study, Ariño proposed that as they limit partners, the goals of the partners should include the goals of the other stakeholders.

According to the findings from some interviewees, 'softer' issues were identified as critical to performance and success. Among these were cultural issues. One interviewee commented that research has focussed on 'hard' issues, and offered a reflection that they had omitted to consider soft issues when beginning to deal with strategic alliances. In line with this finding, Christoffersen (2013) stated that it was not common to find research which contained a mixture of hard and soft metrics, Christoffersen categorised cultural issues under relational conflicts - these are measured according to the perception of the partners. He claimed that cultural issues had a negative impact on performance.

The complexity of measurement, the need to consider softer issues, and to take into account stakeholders perceptions, offer new viewpoints on how to integrate this aspects as part of the process of the development of strategic alliances, beyond the conventional process proposed so far, one way is through a more holistic framework, as presented in the holistic model proposed.

Problems, risks, critical factors, failure and success

This section presents the discussion of the key findings of problems, risks, critical factors, failure and success. In this discussion, the relationship between categories is going to be identified and will be discussed at the end of the section. The findings are presented following the same sequence as chapter 5's findings and is illustrated in the following figure.

Figure 7-2.- Structure of findings of problems, risks, critical factors, failure and success



The relevance of these categories is that they emerged from the experience of individuals in the energy industry and could be aspects to review in the process of developing a strategic alliance. These categories could be integrated in a holistic process framework, such as the one presented in the contribution section of this chapter.

Partner related issues

Literature has acknowledged that partner selection is a critical stage in the process of a strategic alliance (Jiang et al. 2008, Dacin et al. 1997, Cummings and Holmberg 2012). Findings showed that amongst the categories that affect performance were issues related to partners and these were integrated in figure 5-5 of chapter 5. The details of the sub categories that emerged and their connection with the literature are presented below and include partner's technical and financial capabilities, issues related with vested interest and the complexity of partnering.

Partner's technical and financial capabilities

Findings showed that some interviewees were concerned about the partner's capabilities. They identified the partner's capabilities as a source of risk and difficulty. Because of the levels of investment in the industry, this finding is critical. Considering the importance and consequences of choosing a partner, time should be invested in the selection process. Das and Teng (2001)

classified risk as relational risks and performance risks. Performance risk is related to the volatility of the market and to the competence of partners. Even when relational risk is absent due to full cooperation, a lack of competence can result in issues affecting the performance of the alliance. This increases the importance of partnering.

Issues related with vested interest

The vested interests of partners at the individual level emerged as a key driver in the accounts of some interviewees. Good communication and identification of problems can address issues arising from partners' pursuit of competing interests that depart from agreements, Das and Teng (2001) studied this in terms of opportunistic behaviour where organisations and individuals seek to achieve their own interests. At the international level, this could be related to cultural issues and differences among partners. It increases relational risk, where partners behave in a different way than expected. This impacts the level of trust among partners. Trust is one of the values which keep a balance in the relationship along the formal lines of agreements. In instances where the level of trust is low, implementing detailed contracts and monitoring activities incur an increase in costs.

Complexity of partnering

Some interviewees perceived partnering as a complex process, with the metaphor of marriage frequently applied to suggest that there was no a simple recipe for success. There was also a perception that partnering was more difficult to manage than 'going it alone'. The complexity of strategic alliances increases as the number of partners increase due to the challenge of keeping cohesion and involvement among partners.

This finding is in line with Killing (1988), who found that the number of partners increase the organisational complexity of an alliance due to the increase in difficulties in the decision-making process. The more equal the role of each partner, the more difficult and time-consuming the decision making process was found to be. Makino and Beamish reached a similar conclusion (1998, cited in Beamish and Lupton 2009, p. 84). They argued that the performance of the strategic alliance is greater when there are a smaller number of partners. However, Beamish and Kachra (2004) pointed out that most of the research has been focused on the quality rather than

the quantity of the partners. The prevalent assumption has therefore been that as the number of partners increases the complexity increases; the risk of underperforming therefore increases. Thus, in their research, Beamish and Kachra found that the number of partners does not affect performance. They argued that the complex environment in which alliances are developed requires multiple partnerships. The perception of complexity in the minds of managers makes them unwilling to take opportunities. Beamish and Kachra further specified that managers needed to be competent in coordinating resources. This reflects the increasing relevance of the managers' skills in the performance of strategic alliances as the number of partners increase. As Das and Teng (1999) argued, complexity is related to the learning curve of organisations in understanding how to work best with each other.

Alignment

Difference in interests, objectives, expectations and rewards

According to some interviewees, a difference in objectives was perceived as the cause of some misalignment between partners. However, Das and Teng (1999) suggested that different objectives were not necessarily an aspect of concern if these objectives were compatible in terms of being able to be achieved simultaneously.

Some interviewees suggested that differences in expectations could be attributed to differences in sizes between partners. Authors that have developed research on dissimilarities among partners (such as 'Alliance experience, age, strategic scope, strategic content, goals, ownership type and reputation) found that dissimilarities need to be considered (Lowen and Pope 2008; McCutchen et al. 2008; Park and Ungson 1997; Saxton 1997; Yeheskel et al. 2001, cited in Christoffersen 2013, p. 75). Moreover, Christoffersen (2013) claimed that differences in size have a negative impact on performance as size dissimilarities often result in other dissimilarities.

In line with this, Doz (1988, cited in Christoffersen 2013 p. 75) found that difficulties arise between partners of different sizes because of differences in culture, policies on information and incentives. Moreover, Beamish and Jung (2005, cited in Christoffersen 2013 p. 75) argued that difficulties occur due to differences in systems and protocols. Shenkar and Zeira (1992, cited in Li et al 2002, p. 330) argued that diverse expectations could arise from differences in norms and

ways of operating, and that the norms of the bigger partner have more likelihood of being adopted as the framework to follow. One interesting connection is the relation between culture and difficulties resulting from differences in size between partners.

Doz (1988) found that differences in size could result in issues related with the decision-making process. Larger organisations are more bureaucratic; making decisions takes more time, more people are involved, agreements are reached by consensus and decisions are questioned and susceptible to change.

Among the sources of misalignment were the differences in reward. This was identified as a potential problem in the findings by one interviewee. It is related to the perception of inequity in terms of an imbalance between work and rewards.

Difference in rewards can bring a sense of inequity. If one partner perceives that there is an imbalance between work and rewards, the equity theory of motivation contends that a party that feels they are being unfairly treated will try to restore a sense of equity. This could diminish their willingness to commit (Das and Teng 2001). Performance can be negatively influenced by inequity, because the chances of success of an alliance that is perceived to be unequal are low (Bleeke and Ernest 1991).

The prediction of inequitable situations could be signalled during the formation of the alliance. The signals might include dissimilarities among partners, a difficult legal environment and when one of the partners does not have options which extend beyond the strategic alliance (Das and Teng 2001).

The challenge is to keep continuous alignment between the parties. This requires that time is spent creating the same understanding of expectations and objectives among partners in the process of developing a strategic alliance.

Change

Change and related issues was a category that emerged frequently with interviewees. In the findings, in terms of expectations, the perception of failure, the impact of markets changing, and the intrinsic complexity of change for organisations. The connection with existing literature is presented below.

Change in expectations, interests and objectives

Accounts showed that one major concern was a change in expectations, interest and objectives. Some interviewees believed that flexible agreements were needed to accomodate change and to plan for exit. The response to change can differ from partner to partner and also depends on the other options available.

The literature acknowledges that objectives change over time and that the relevance and complexity of anticipating potential issues associated with this also changes. Scenario planning could be employed to assess the evolution and positions of the partners (Das and Teng 1999), and to ‘understand how critical uncertainties in organizational environments might interact in surprising ways’ (Bowman et al. 2013, p. 736).

The flexibility in documentation expressed by one interviewee in the findings is related to the level of formality selected for the strategic alliance and the implications of this. Van de Ven and Walker (1984, cited in Ring and Van de Ven 1994 p. 108) found that issues among partners were related to the level of formality and monitoring. Conflicts emerged if there was excessive formality and could result in mistrust among partners. Ariño and De la Torre (1998) suggested promoting the development of procedural solutions at early stages in order to prevent conflict in the management of the alliance. The idea was to set rules to restore efficiency and equity in the relationship and avoid unilateral actions. Ariño and De la Torre believed that by having structural rigidity, partners would focus on achieving success.

Das and Teng (1999) acknowledged that because of the high degree of competitiveness and volatility in the markets, flexibility was relevant to achieving success. At the same time, the

authors recognised the challenge in finding the right balance between formality and flexibility. High levels of flexibility could result in opportunistic behaviour; a sound level of structural rigidity could prevent this behaviour and help to strengthen the relationship.

Change as a perception of failure

A significant and interesting finding that emerged from the data of some interviewees was the subjective and dynamic nature of the perception of the failure of a strategic alliance. Some interviewees believed that just because an alliance comes to an end does not necessarily mean it has failed. Changes in objectives and interests were perceived as natural in the process of creating, maintaining and ending an alliance.

Subjectivity is related to the way performance is measured. Some studies have used stability measures to assess performance, among them exit from markets, changes in equity and contracts, takeovers and termination of alliances. However, stability measures do not necessarily reflect the success of a strategic alliance. For instance, an alliance that has a good performance could be an interesting acquisition target. If it is, therefore, more convenient for the partner to sell the alliance this does not mean that the alliance was a failure (Cristoffersen 2013). Sometimes the strategic alliance could be planned as an equity play and this does not necessarily equate to failure (Gomes-Casseres 1987). On the other hand, small failures are perceived to have great potential for learning from experience, more so than even successes or major failures (Eisenhardt and Martin 2000).

Change and markets

Accounts from some interviewees in the findings reflect the dynamics of the market in the industry. Particularly in the oil industry, changes could encourage the development of alliances or a continuous recalibration and adjustment to the new environment.

In line with this finding, Hoffman (2007) suggested three strategies - adapting, shaping and stabilising- are available for firms to face the challenges of uncertain environments through alliances, the adapting strategy (probing alliances) refers to broadening the resource base and looking for strategic flexibility. This could be achieved in the search for new opportunities,

making selective investments, for instance contractual alliances with local partners. The shaping strategy (core exploration alliances) is achieved by pursuing the strategic interests of the organisation in order to shape the environment. Examples of this type are new technology alliances or alliances focusing on improving product lines. The stabilising strategy (exploitation alliances) aims to commercialise resources and capabilities. This can be achieved through long-term supply contracts, distribution and sales alliances, or in alliances among competitors. A combination of these alliances was defined as multiple alliances, where this hybrid strategy is appropriate in an environment with high uncertainty.

In the oil and gas industry, the variability of the price has implications on the relationship between host countries and companies exploring and producing hydrocarbons - mostly through a strategic alliance. Host countries and companies allocate the economic benefits and risks by agreeing on the economic and fiscal provisions that will govern their relationship. They take the context and assumptions about the future into consideration, including the anticipated price of the commodity. If the price changes this could create an imbalance in the expected risks and rewards for the parties. Duval et al (2009) therefore suggested that host countries and companies should work towards including self-adjusting fiscal provisions in their agreements. These would avoid the modification of their original fiscal agreement during their relationship and also maintain a balance between risks and rewards if the environment changes.

The complexity of change

One of the challenges of change is related to its complexity in the organisations involved in a strategic alliance. This is because each partner has to align with the other and work in a different way compared with their traditional manner of doing things. Each organisation has their own processes and systems, as reflected in the findings. Zucker (1977 cited in Ring and Van de Ven 1994) explained this, arguing that within organisations, formal and even informal processes that are institutionalised are difficult to change. It seems that expectations of change could be heightened when dealing with more than one organisation, as in the case of strategic alliances.

Exit

The majority of interviewees in the findings showed that exit is a relevant aspect to consider when developing a strategic alliance. This category should be considered as a compulsory theme to discuss with partners involved in the process of developing a strategic alliance. A series of strategies were suggested: exit should be considered as a natural process in the strategic alliance, however sometimes this was overlooked and exit could be seen as an alternative to change. In light of this, Das and Teng (1999) suggested that exit clauses allow partners to leave the alliance when the market conditions change. The exit clauses should clearly identify what each party receives in case of termination or change in the relationship. The benefit of exit provisions is that they could diminish the likelihood of becoming embroiled in long and exhaustive disputes. Gulati et al. (2008) suggested promoting early discussions among partners on dissolution of the alliance and making an agreement on several exit clauses linked with contingencies. In that way, when the contingency occurs the exit clause and terms are activated in accordance with the nature of the circumstances.

Legal-Regulatory problems and risks

Technology and intellectual property issues

Some interviewees pointed out the issues related to technology and intellectual property as a major concern. When conducting business in other countries, one of the main risks is to lose control over IP and technology. Strategies could be developed in order to protect technology and IP, such as to keep control over the process, provide a second-best technology, keep knowledge outside operations and keep developing technological advancements at a constant pace.

The literature acknowledges that IP and technology are critical in the development of strategic alliances. Strategies to protect IP and technology have been identified, such as centralising contact points between the alliance and partners and sharing the highest costs and co-ordinating staff. By doing this dependence among partners increases, making it more difficult to avoid working together and strengthening the ties (Bleeke and Ernst 1991).

The need to protect technology and IP through contracts and strategies implies that issues

concerning the level of trust exist. Organisations act to protect technology and IP through guarantees, insurance mechanisms, laws and increasing their transaction costs (Ring and Van De Ven 1994). This highlights an interesting aspect that could contribute towards understanding why organisations enter into strategic alliances despite having concerns about losing control over technology and IP. It seems that the benefits of developing a business opportunity through strategic alliances offset the transaction costs related with protecting technology and IP by contractual means. There could also be an indication of the connections between risk aversion, trust and the search for growth.

Culture

Different organisational cultures

Accounts from some interviewees in the findings showed the challenges that strategic alliances face when dealing with different cultures. Organisations have to face a process of change in order to accommodate different values and ways of working. If this accommodation is not achieved issues around alignment and conflict among partners could arise.

Within the literature, the theme of culture has been studied in two dimensions - national cultural distance and organisational cultural distance. Hofstede (1980 cited in Christoffersen 2013 p. 75) defined national cultural distance as the 'dissimilarities in beliefs, values, practices and behaviours shared by members of a nation'. Most authors agreed that national cultural distance 'increases the risks of mistrust, misunderstandings, miscommunication and managerial conflicts' (Glaister and Buckley 1999; Kim and Parkhe 2009; Makino *et al.* 2007, cited in Christoffersen 2013, p. 75). Makino and Beamish (1998) found that cultural distance was a major problem, identifiable in strategic alliances that failed. Contrary to this, from a resource-based view approach, Beamish and Kachra (2004) suggested that cultural distance brings resource diversity and complementarity. These elements could increase the chances and potential of value creation.

Meier (2011) found that in alliances pursuing the transfer of knowledge, differences in cultures could result in issues of communication among partners due to differences in languages, beliefs

and attitudes. These issues could be overcome if organisations were willing to be flexible and invest time and resources to improve their understanding of other cultures.

Dealing with cultural issues

Suggestions from some interviewees in the findings on dealing with cultural issues included running pilots to minimise risk exposure.

When becoming involved with partners for the first time, it is better to start with informal deals that do not represent high levels of risk. If deals prove to be beneficial, further commitment could be made. This is a way to build trust. If partners rely on each other there are potential decreases in transaction costs due to a lower need for legal protection (Friedman and Alford 1991, Van de Ven 1976, cited in Ring and Van de Ven 1994 p. 101). Killing (1988) suggested that starting with simpler alliances was also a way to develop a long-term relationship and could be a first step in developing more complex alliances.

Other ways to build relationships are by embarking on alliances and setting specific milestones. Once achieved, this allows further commitments to take place and could be agreed via short-term recurrent contracts (Das and Teng 1999).

Clarity

In the findings, some interviewees cited that clarity is critical to success and that it facilitates alignment between partners. The metaphor of marriage was used to demonstrate that when there is clarity and alignment there is no need to look at the contracts. Kent (1991) suggested that clarity of purpose could have an effect on the performance of an alliance.

Stakeholders

Some interviewees highlighted the relevance of stakeholders (mainly government and communities) in the development of strategic alliances. Kale and Singh (2009) contended that society is increasingly attentive to the way firms serve the interests of their stakeholders. Because of the importance of communities, there is a new category of alliance developing with non-governmental organisations in order for firms to better understand the needs of

communities. Authors acknowledged that there is little research in this area.

Trust

According to some interviewees in the findings, a lack of trust in early stages could result in a strategic alliance failure. Despite trust not being mentioned frequently in the interviewes, issues related to trust were connected with other categories affecting performance. This has been discussed previously.

Kale and Singh (2009) believed that developing trust in the post-formation stages of the strategic alliance was critical to success. This is because it facilitates the exchange of information, provides a perception of more certainty and increases the willingness of partners to adapt to a change in circumstance. This ultimately facilitates the relationship among partners.

Leadership

A perception that the role of the leaders was critical to manage different cultures, stakeholders' interest, align organisations and to provide clarity to strategic alliances was pointed out by one interviewee in the findings. This was important because it showed a connection between leadership, alignment and clarity. Li et al. (2002) argued that effectiveness in top management teams is critical to success because there are sizeable challenges in dealing with strategic alliances in the international context - such as difference in cultures, ways of managing and dealing with different objectives. Kent's (1991) study suggested maintaining leadership in the development of alliances ensures a better communication process. He furthermore offered that being more sensitive to stakeholders increases the probability of success. It seems that more research on the leadership and management of alliances is needed.

Influence

The following findings relate to influence. Greater detail can be found in Chapter six, preceding. An advancement derived from the process approach taken in this thesis is to integrate the external and internal influence in the development of strategic alliances as part of the process.

External

External influence plays an important role in the development of strategic alliances. Some interviewees in the findings highlighted the dual role of both government and markets. Governments on the one hand encourage the development of strategic alliances, while, on the other, constrain terms and conditions for their development. China and Egypt were provided as examples. Gomes-Casseres (1987) claimed that governments in some countries have imposed restrictions on foreign investment, encouraging the development of a strategic alliance as a mode of entry. This seems to apply to the energy industry - countries that are starting to develop their natural resources create national oil companies to be a compulsory partner in agreements with other companies. Uganda is a recent example (Development 2015). At the same time, political sanctions in some countries impose constraints on companies from certain nationalities in developing strategic alliances. Iran and Russia were mentioned in conjunction with this.

Markets could also play a dual role and the case of Japan was mentioned by one interviewee in the findings. This example has been cited in the literature as a domesticated market - ‘the somewhat derogatory term “Japan, Inc.” is used to denote a complex system of domesticated markets. This system is charged with stimulating exports while subsidising domestic producers and barring imports of manufactured goods. The core of the Japanese trade system is the “silk curtain”- the intricate, fine-spun networks of manufacturers, middlemen, bankers, and government agencies’ (Arndt 1979 p. 71).

It seems that this dual role could have an effect on the performance of strategic alliances. If partners are selected as a requirement from governments rather than on their characteristics, it could offer a research opportunity on how compulsory partnerships affect performance in strategic alliances.

Internal (Executives & Managers)

The majority of respondents in the findings showed that executives could influence the performance of strategic alliances in various ways, such as support and endorsement and in selecting the right people to manage the alliance.

Li et al. (2002) found that some authors had studied the challenges facing top management teams. These challenges included dilemmas of loyalty, commitment and organisational identity and are mainly due to having to deal with a complex system with different cultures and expectations. This has been studied with social identity theory, considering both the satisfaction of the person and the effectiveness of the organisation. It becomes more complex for strategic alliances because more than one organisation is involved. Studies have been developed regarding loyalty to the parent or the alliance. These studies have produced different results. Li et al found that some authors argued that managers are more committed to the alliance than to the parent, however Fraine and Geringer (1995) found the opposite. According to Li et al, there is a need to conduct more research on how this plays out when more than two partners are involved. It was suggested that less conflict could occur due to a dilution in the identity strength of just two partners, thus decreasing the stress for managers.

The degree of freedom of managers emerged from some respondents in the findings as another constraint. This is interesting because, during pre-formation stages of the alliance, a structure is selected that might constrain the future management of the alliance. Authors who have studied this include Glaister et al (2003). They acknowledged that managers of strategic alliances are constrained by the parents. Reuer et al (2014) argued that boards delegate more to local strategic alliance managers in international strategic alliances because of the uncertainty and lack of knowledge in the environment. Bleake and Ernst (1991) claimed that a requirement for alliances to work is to provide enough resources, to appoint a person in charge who can be trusted and to give him freedom to accomplish the endeavour. Killing (1988) added that if freedom is constrained the chances of failure increase.

Exploring how the internal and external contexts shape the development process of strategic alliances from a process approach with interviewees advanced the understanding of how the internal and external influence impacts the performance of strategic alliances (Pettigrew 1997)

Skills

There were a variety of thoughts in the findings regarding the difference in skills between a manager of an organisation and a manager of an alliance. The literature is in line with the belief that managers of strategic alliances require different skills. Killing (1988) argued that managers of alliances required these different skills because tasks and processes are more complex when more than one organisation is involved. Gulati (2012) claimed that for alliances to be successful, managers should have ‘political skills, legal expertise, diplomacy, and psychological acumen’ (p. 532).

The findings outline a set of skills that are desirable for a manager in the energy industry. This offers new points of view on the need for soft skills despite the rational leanings of decision makers in the industry.

Prospects for the future of strategic alliances

Scenarios, motives and challenges

The majority of respondents in the findings suggested that strategic alliances would continue where the role of national oil companies could increase benefits derived from pursuing an internationalisation strategy and enhancing competitiveness. The rationale for entering strategic alliances would be similar where a herd effect could be anticipated; if strategic alliances are perceived to be successful, more companies would pursue their development. However, the sustainability of this is questionable. Challenges are related to culture and different financial expectations, technology and the difficulty in managing portfolios, disruptive change, and stakeholders (especially communities having a louder voice in the development of strategic alliances).

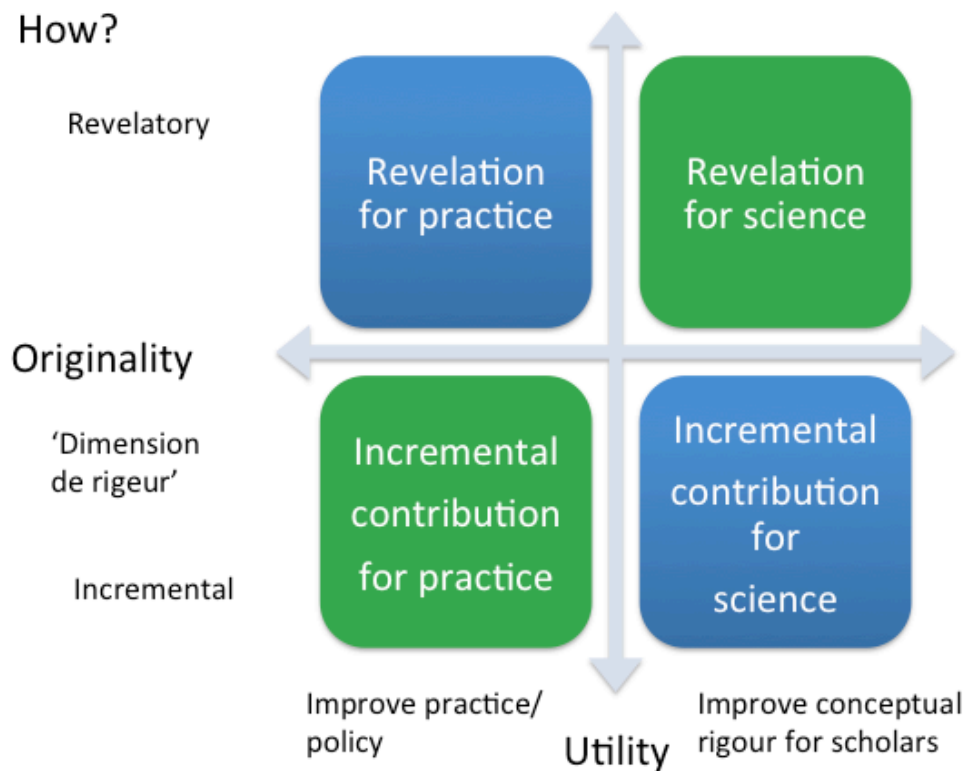
Das (2001) found that decisions to enter strategic alliances could be influenced by mimetic behaviours. Pfeffer (2003) claimed that competition increases the pressure of imitating other organisations' strategies. DiMaggio and Powell (1983) claimed that organisations tend to mimic organisational models that are perceived to be successful.

The perception of the future of strategic alliances is influenced by the context and beliefs in the initial stages. This departs from the idea that 'the legacy of the past is always shaping the emerging future' (Pettigrew 1997 p. 339). Scenario development is an aspect which could be integrated as part of the process of strategic alliance development as a way to create common understanding and vision of the future and challenges that a strategic alliance might face. This is considered in the holistic process model presented in the contribution section of this chapter.

Contribution

According to Corley & Gioia (2011 p.17), 'theory reveals what we otherwise had not seen, known or conceived... that new theory allows to see profoundly, imaginatively, unconventionally into phenomena we thought we understood', that scientific utility 'is perceived as an advance that improves conceptual rigor or the specificity of an idea and/or enhances its potential to be operationalized and tested' and practical utility because 'theory can be directly applied to the problems practicing managers...face' (Corley and Gioia 2011, p18). My research is positioned in the upper quadrants of Figure 7.3, which relate to revelation for science and for practice. This is because it takes a cultural and process theory approach to work and develops a holistic multiperspective process model to understand and enhance the performance of strategic alliances. Process theory contributed to looking at how strategic alliances are developed through the lens of those with strategic alliance experience in the energy sector. By using process theory, temporal progressions of activities were incorporated as elements to explain and understand strategic alliances (Langley, Smallman et al. 2013). The narrative surrounding strategic alliances can also aid an understanding of their performance by constructing cultural visions among different individuals who have been involved in their development (Reichie et al 2010, Giorgi et al 2015). This research also has practical implications in preventing problems and suggesting possible solutions to make strategic alliances work more effectively in the energy sector.

Figure 7-3.- Theoretical Contribution



Source: Adapted from Corley & Gioia (2011)

My research applied new theories and approaches in the field of strategic alliances. It is accepted that the development and implementation process is more complex in this field because there is more than one organisation involved. External factors and individuals from different organisations can influence the performance of the strategic alliance. From the standpoint of practice, the energy industry has been using strategic alliances and it would seem that this use is going to increase in the future. Therefore, this research's enhanced understanding provides insight that could be useful to improve managerial practice. In the following sections the contribution is explained in more detail.

A second contribution is that this research provides a holistic approach, from the perspective of those with experience, to understanding the performance of strategic alliances in the energy sector. A holistic perspective means that it integrates the early and most recent concerns of

researchers from a process approach, it incorporates the external and internal influences, the environment and the prospects for the future of strategic alliances. This is achieved through the integration of the key elements of strategic alliances, such as meaning, types and motives, how decisions are made to enter a strategic alliance, the selection of a partner, portfolio of alliances, the internal and external influences and looking at the future and challenges of strategic alliances. I will now elaborate on the contribution to practice and theory and explain the multiperspective process dynamic model that is developed integrating the key elements of this research.

Contribution to theory

- Provides research that takes a cultural and process theory approach to understand and enhance the performance of strategic alliances.
- Increases the number of qualitative studies in the field and provides specific research to understand the performance of strategic alliances in the energy industry.
- Provides a model that could be used to integrate the various theoretical approaches used by researchers in the field. These researchers are concerned about the fragmentation of research on strategic alliances.
- The research design of this study could be replicated in other areas of the extractive industry in order to develop comparisons and a learning process of experiences.
- This research has highlighted additional elements in contributing to the understanding of alliances at the portfolio level (Wassmer 2010).

Contribution to practice

- Provides managerial practice with an understanding of the problems associated with strategic alliances in the energy sector from the perspective of individuals with experience in the field.
- This model contributes to the advancement of the models already developed. This is achieved by incorporating the external and internal influences and data categories that

emerged from the findings. It acknowledges additional factors that are of concern in the energy industry and considers the future for strategic alliances as part of the analysis.

- It is useful as a guide to design the strategic alliance and also to direct the pre-formation, formation and implementation process by looking at the variables that can influence the performance of strategic alliances.
- It could be applied as a reference in the process of pursuing acquisitions (Kale and Singh 2009).

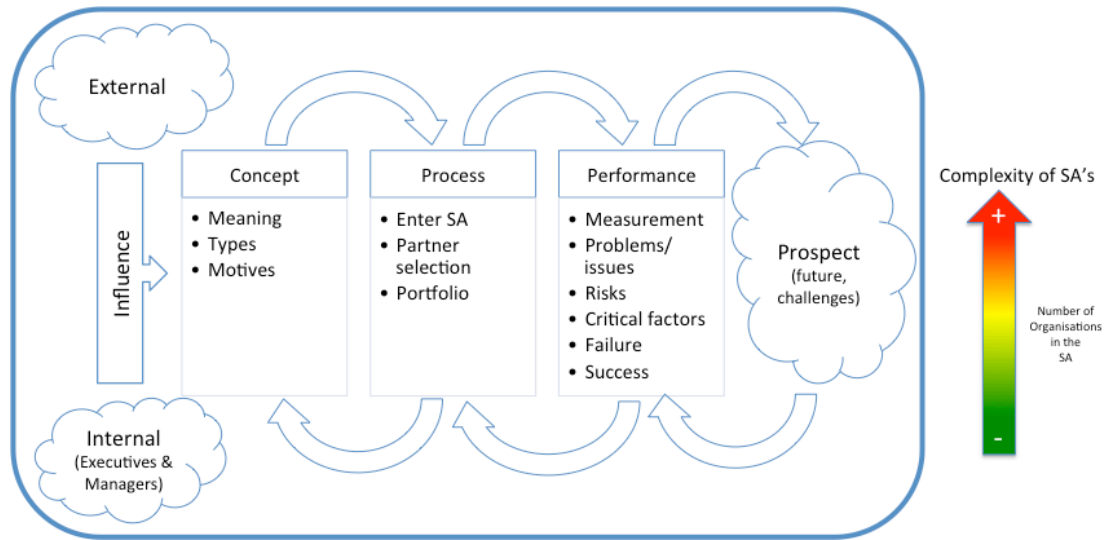
The following section provides detail of the proposed conceptual dynamic model of strategic alliances.

Conceptual holistic dynamic multi-perspective process model of strategic alliances

The final contribution of this research is the holistic conceptual dynamic multi-perspective process model of strategic alliances that is built from the cultural and process theory approach. It integrates the theoretical approach, the literature review, the findings of this research, and my personal experience in the field.

The model is illustrated in the following figure.

Figure 7-4.- Conceptual holistic dynamic multi-perspective process model of strategic alliances

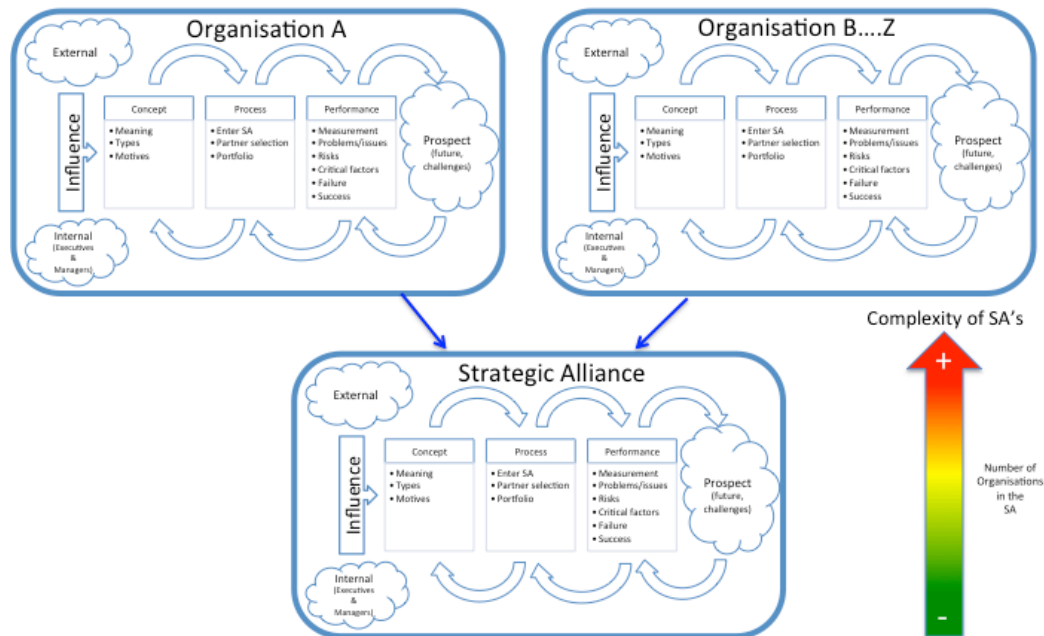


The conceptual holistic dynamic multi-perspective process model has theoretical and practical implications. It integrates and organises the themes that were considered in the research: concept, process, performance, influence and prospects of strategic alliances. The arrows represent an iterative process that travels in both directions and demonstrate the influence of:

1. External and internal factors in the definition of concept and meaning of the alliance, the type of structure to be selected, motives and rationale to enter the alliance;
2. Process, decision to enter a strategic alliance, and management of alliance portfolio;
3. Performance, measurement of strategic alliances, problem identification, risks, critical factors, failure and success assisted by the categories that emerged from the findings;
4. Prospect of the strategic alliances that is influenced by perceptions of performance and at the same time perceptions influence the other elements and the external and internal factors.

The conceptual dynamic multi-perspective process model could be expanded to inform the interrelationships among multiple organisations involved in a strategic alliance. Process theory enables understanding of how strategic alliances emerge, change and unfold over time, and the reasons for their evolution (Langley 1999; Langley et al. 2013); this contribute to understanding the performance of strategic alliances. The following figure illustrate this.

Figure 7-5.- Expanded Conceptual holistic dynamic multi-perspective process model of strategic alliances



From a theoretical perspective, the model could be used to incorporate the theoretical approaches that have been used to study strategic alliances in academia so far. This model provides a range of new insights, particularly in the pre-alliance stage, for further research and theoretical development.

For example theories and approaches identified in the literature are illustrated in the following table. There is the opportunity to add other elements of the model with their theoretical approaches used so far.

Table 7-3.- Theories & approaches of strategic alliances in the literature

Topic	Theories/approaches
Motives	Domesticated markets, market attractiveness and organisational power (transaction cost, strategic behaviour and organisational theory), interorganisational Exchange behaviour and resource dependency, inteorganisational relationships, resource based view (Arnd 1979, Kogut 1988, Williamson 1981, Pfeffer and Salancik 1978, Oliver 1990, Barney 1991)
Internal influence	Institutional theory, logics, agency theory, social identity; (Nippa 2007, Thornton et al. 2012, Li et al. 2002);
Portfolio of alliances	Social network theory, organizational learning in general, exploration/exploitation framework, resource-based view of the firm, dynamic capabilities, knowledge-based view, relational view, evolutionary economics, transactions cost economics, agency theory, contingency theory, coevolutionary perspective, contract theory, real options, and resource dependency theory (Wassmer 2010),

From a practical perspective, I can see that the model could be utilised in the formation and post-formation stages of a strategic alliance by a company or companies interested in developing a strategic alliance. This would assist in reaching a common understanding of the factors around the development and implementation of a strategic alliance. Discussions could be augmented through the use of the diagrams developed in the findings chapters.

The model has a flow where an organisation begins by defining the concept of the strategic alliance in terms of meaning, type of structure, motives. This is followed by the decision to enter a strategic alliance, selection of partner, evaluation of their portfolio in terms of coherence and congruence with other alliances. It considers taking internal and external influences into account in the design of the governance of the alliance, also considering the environment and prospects. Here, scenario planning could be used not only for one organisation but also for all the organisations involved as a way to create a shared vision. This analysis has been informed by

rich insights from highly experienced respondents. The schematic representation of the findings offers models, guidelines and prescriptions for the creation and management of strategic alliances in the energy sector.

This model is dynamic. It can therefore be applied to all the stages of alliance: pre-formation, formation, implementation and also as a retrospective model for analysis on performance. The model can thus contribute to managerial practice.

Limitations and further research

Limitations

I discussed the findings with one of my interviewees, and with other individuals with experience in strategic alliances, and received positive feedback on its contribution to practice. If more time were available, further discussions with other interviewees could take place to fine-tune the model.

Access to information is another limitation. Information on details and perceptions of people working in strategic alliances are not available in the public arena. It is also challenging to engage participants. This was commented on by one of the interviewees in an informal conversation when talking about the research and people who might be interested. One of the big challenges is to convince people to share their thoughts on this topic. This information is considered commercially sensitive and the energy industry seems to be generally closed to the scrutiny of researchers.

Related to access to information is the limitation of the sample size. A qualitative study takes intensive use of resources and it takes time to identify participants, therefore a big sample size is not possible. The objective was to get as many participants as possible within a specific timeframe. Nevertheless a small sample facilitated obtaining in-depth accounts of the experience of people in the development of strategic alliances in the energy sector. The cumulative and multidisciplinary perspective of the interviewees allowed a rich and detailed data content.

Futher Research

The field of strategic alliances is a fascinating area of research, mainly because more than one organisation is involved. This departs from conventional understanding on how a single organisation behaves. I share the view of Olk (2006) that there is more work to be done in the area of understanding performance; the following are some opportunities that I have identified for further research and would build on the research I have developed.

As discussed previously, the conceptual dynamic multi-perspective process model developed with this research offers opportunities to enhance the understanding of strategic alliances. It could be used as a framework in the development of strategic alliances and could be tested empirically in a longitudinal case as a way to to build a more general theory (Ring and Van de Ven 1994, Hong et al 2009). It could then be reviewed to integrate other important features that may have been ommited in this work.

The research design of the qualitative study developed could be applied to other industries and within similar sectors in the extractive industry. For example, in mining to develop comparisons between findings in order to identify how the performance of strategic alliances is influenced by sectors that share some commonality.

Some links emerged amongst the categories influencing the performance of strategic alliances. These links could be reviewed in order to interpret their connections and test them.

The area of alliance portfolio has been identified requiring further study. This provided some insight on how alliance portfolios are developed in the energy sector. However, more research is indeed required due to the importance of the portfolio in the performance of an organisation.

There was a belief held that the scientific background of the energy industry influences the characteristics expected in the selection of a partner. I did not find, in the literature reviewed, any evidence that the science-based nature of the industry influenced the criteria used to select partners.

Leadership was identified as critical in the management of different cultures, stakeholders' interests, alignment of organisations to provide clarity in strategic alliances. However, the topic of leadership in strategic alliances requires further research as I was not able to locate much literature in this area.

External influence imposed by governments on the dynamics of strategic alliances is an area that could be pursued in further research. Governments can influence the selection of partners and, considering selection of partners as critical, it would be interesting to develop research on constraints in partner selection and their effect on the performance of strategic alliances.

The influence of stakeholders in the development of strategic alliances is increasing, especially as the role of communities gathers impetus. It seems that more research is required in order to understand the needs of communities and their influence on the performance of strategic alliances.

Conclusions

The energy industry is perceived differently from other industries. This is due to the relative importance of countries in terms of natural resources and because of the scientific culture typical within the industry. These two factors have implications on the way strategic alliances are perceived from internal and external viewpoints. From an external perspective, governments take more care and pay more attention as to how actors work in the development of the industry. In most instances where a government participates in the development of the resources, it is directly through a national company in a strategic alliance, through regulation or requiring companies to partner with local companies. This gives rise to a question as to which kind of role should a government play and how. It seems that a case-by-case approach should be applied, as every country is different in terms of their natural resources, development of the industry, economic wealth and technology. As this is a commodities industry, price influences the bargaining power of governments and companies, influences co-operation among them and consequently influences the development of strategic alliances.

The findings and literature share the view that each strategic alliance is unique; there is no single definition. There are, however, different types of strategic alliance and this could contribute to thinking about strategic alliances as complex. In a dynamic and uncertain environment there is a need for flexibility and the capacity to adapt to accommodate change. The selection of the type of strategic alliance influences the degree of freedom in their management. This points to the degree of influence of the individual over the organisation and suggests looking at this while considering institutional theory, institutional logics and issues around agency theory.

Diversity is present in the decision-making process as to whether or not to enter a strategic alliance. There are also elements of legitimacy and trust raised by bringing people outside organisations in to make decisions. The fact that complexity increased as the number of partners increased was highlighted in the findings. However, different positions were taken in the literature. Some authors argued that complexity was not relevant, but positioned the skills of managers as key to managing alliances with a greater number of partners. Findings provided some insight and tools on how to manage an alliance portfolio and concurred with the literature in terms of the competition of alliances over resources. More research is needed in this area.

The measurement of performance is complex and requires a multiperspective approach including softer metrics and taking stakeholders' preferences into consideration. Partnering is multifaceted; managing more than one organisation is difficult because of differing cultures and ways of working. A sense of equity as regards rewards for each partner impacts performance. Change is natural, expectations, interests and objectives shift; failure could be a perception; and change is complex. Exit could be an option in pursuing change and terms of exit should be agreed in advance. Several exit clauses to be linked with contingencies were suggested. Trust was a category infrequently mentioned; however, it emerged in relation to other categories. Leadership is key to the performance of strategic alliances - it seems that there is an opportunity to develop further research in this area.

Managers in alliances are constrained by the structure selected for the alliance. They face a dilemma over loyalty to the parent organisation, have some concerns about the future of their career and expect endorsement from the executives, who influence the alliance. This influence

stems from their decisions on the structure and the people selected to manage the alliance. Therefore, the skills of managers are important to enhance performance. The expectation is that strategic alliances are going to continue to be a favoured option for strategic development. The drivers for entering strategic alliances will continue to strengthen and we will witness increasing participation by community stakeholder groups.

My contribution lies in taking a cultural and process theory approach to develop a conceptual holistic dynamic multi-perspective process model of strategic alliances, integrating the theoretical approach, the literature review, the findings of this research and my personal experience in the field. The model consolidates and organises the themes that were considered by the research and provides a framework to analyse strategic alliances and understand performance. This model departs from the conventional models of strategic alliances by integrating other elements that impact alliances' performance. This research has practical implications for preventing problems and posing possible solutions to make strategic alliances in the energy sector work more effectively.

There were some limitations on time and access to information. Further research is suggested and opportunities to test the model proposed in a longitudinal study. There is much work to be done in the area of strategic alliances and this thesis provides a foundation for ongoing research.

CHAPTER 8 'CONCLUSION'

Economical, technological, information, social and political factors are driving organisations to pursue different forms in order to respond more quickly to a dynamic and changing environment. Internationalising firms are strengthening internal networks among functions, divisions, countries and regions in order to speed the transfer of knowledge and skills. Organisations are investing in alliances and other partnerships to compete through co-operation (Pettigrew, Massini et al. 2000). Co-operative strategies are a means to creating strategic change; the influence of strategic alliances is expected to continue (Harrigan 1988; Harrigan 2015).

Strategic alliances are regarded as a new form of organisation in some industries, and the pace of growth in the last decades has been significant. (Das and Teng 1999; Ernst 2003; Kale and Singh 2009). In the energy sector, strategic alliances are not new (Kent 1991). This sector, especially within the petroleum industry, has been characterised as a high-risk industry. This is due to either the technical challenges embedded in the nature of the activity or because of the geopolitical issues related with to location of natural resources. To face the challenges of this industry, strategic alliances have been employed since the outset (Yergin 2012). Their development is expected to increase (Van Grondelle 2012, World National Oil Companies Conference 2013). Despite their popularity, however, the failure rate for strategic alliances in most industries is high (Dacin, Hitt et al. 1997; Das and Teng 1999; Langfield Smith 2008; Walter, Lechner et. Al 2008; Kale and Singh 2009; Gulati, Wohlgezogen et al. 2012).

Strategic alliances were considered as hybrid organisations, that is, those which involve resources or governance structures from at least two organisations (Borys and Jemison). This makes them more complex to manage than a single organisation due to differences in culture, language, ways of working and expectations (Ring and Van de Ven 1994, Li et al. 2002).

The findings and literature suggest each strategic alliance is unique - there is no a single definition. There are different types of strategic alliance and this could contribute to viewing strategic alliances as complex. In a dynamic and uncertain environment there is a

need for flexibility and the capacity to adapt and accommodate change. The selection of the type of strategic alliance influences the degree of freedom to manage them. This highlights the degree of influence of the individual over the organisation and suggests considering this in the light of institutional theory, institutional logics and agency theory.

As shown in the literature, different schools of thought have presented various explanations of the motives for organisations to enter into strategic alliances. Earlier researchers grounded this in economic benefit and reduction of risk. Some others cited the benefits of maintaining freedom as a reason not to enter a strategic alliance, relegating such alliances as a second best option. Others argued that international cooperation and benefits such as market development and return of investment were important for their development, also mentioning some government mandates enforcing cooperation. My study fits with these schools of thoughts and shows that, in the energy industry, the arguments of all these schools of thought emerged in the findings. On the one hand they highlighted the benefits of developing strategic alliances and on the other identified the internal and external influence on performance - sometimes encouraging development and in other instances imposing constraint.

Measurement of performance was also found to be complex and requires a multiperspective approach including softer metrics and taking in consideration stakeholders' preferences. Partnering is complex; managing more than one organisation is difficult because they have different cultures and ways of working, the sense of equity on rewards for each partner impact performance. Change is natural and complex, expectations, interests and objectives shift and failure could be merely a perception.

Managers in alliances are constrained by the structure selected for the alliance, they face a dilemma over loyalty to the parent organisation, have some concerns about their career future, and expect endorsement from executives, who influence alliance through their decisions on the structure and the selection of people to manage the alliance, therefore skills of managers are important to enhance performance. The likelihood is that strategic alliances, and the rationale for implanting them, is going to continue to be relevant. The increasing participation of communities in these complex business decisions is also an important factor for consideration.

The significance of this study is that it makes four contributions to the literature, theory and practice on strategic alliances in the energy sector. Firstly, I took a cultural and process theory approach to understand the performance of strategic alliances, how and why they succeed or fail (Reichie et al 2010; Langley et al. 2013; Giorgi et al 2015). As a second contribution, this research integrated hitherto fragmented literature on strategic alliances and provided new data, through the lens of experienced practitioners in the energy sector, on how strategic alliances are developed. Thirdly, it provided an agenda for future research into strategic alliances from an institutional perspective. The fourth contribution was the provision of a multi-perspective process framework that will assist practitioners in managing strategic alliances in the energy sector.

From a practical perspective, this framework could be used in the formation and post-formation stages of a strategic alliance. It would be invaluable to an organisation interested in developing a strategic alliance or to various organisations together in order to reach a common understanding of the issues around the development and implementation of a strategic alliance. Discussions could be assisted through the use of the diagrams developed in the findings' chapters.

The framework has a flow where an organisation starts defining the concept in terms of meaning, type of structure and motives. This is followed by the decision-making stage in entering a strategic alliance - selection of partner, looking at their portfolio in terms of coherence and congruence with other alliances. The framework considers looking at internal and external influences to design the governance of the alliance and also takes account of environmental factors. Scenario planning could be used here, not only for one organisation, but also for all the organisations involved as a way to create a shared vision of possible future scenarios. The data analysis contained in this thesis has facilitated the development of a strategic alliance process model. This is made dynamic through the inclusion of guidelines and detailed insights extracted from depth interviews conducted with highly experienced managers from the energy sector.

This dynamic framework can be used in all stages of the alliance - pre-formation, formation, throughout the implementation stage and also as a retrospective model for analysis on performance, thus contributing to managerial practice.

Not having a common understanding of a strategic alliance makes it more complex to manage and measure its performance. It is advisable, whenever entering a strategic alliance, to set and agree the meaning of that strategic alliance: what the alliance is and what it is not. At the same time, this heterogeneity of meaning helps us to understand that the experience of developing a strategic alliance is unique. It can be said that ‘whenever you have seen a strategic alliance you have seen just one’.

Restrictions imposed by governments or international organisations prevent the development of strategic alliances or limit the areas where certain companies can develop business. However, at the same time, governments play a dual role by encouraging the development of strategic alliances as the only access to natural resources in their countries. They also sometimes constrain the selection of partners which is a critical aspect to the performance of strategic alliances. Stakeholders, and especially communities, are increasing their influence in the development of strategic alliances.

Alliance portfolio is an area that requires greater attention. Organisations which follow fashions and take mimetic behaviours on the basis that strategic alliances are the way to do business need to be careful. The time and resources involved in managing strategic alliances could be high and could distract from core business. The challenge is, therefore, to find the right balance of the number of alliances that could improve the performance of an organisation as a whole.

It is suggested that the development of strategic alliances is an incremental process of learning and reflection. There is no prescriptive method of developing strategic alliances. The managerial mindset required needs to be adaptive while the imperative to maintain alignment is upheld.

This PhD journey started in September 2012 and has been a very interesting process. I started the journey with several questions and ideas in the field of strategic alliances. These were refined in the years that I have been involved in developing alliances. A further challenge was to understand the academic world and the requirements that are imposed to develop a PhD.

This was a process that developed my skills for independent research by looking at the tools and sources available to understand, conceptualise and implement a research design based in a qualitative approach. Applying this to the energy industry, where words are not subjectively interpreted, demanded a different sensitivity from my scientific-engineer background. I needed to develop the strategies to engage participants in the study and present the progress of my research to different audiences. For instance as a guest lecturer I received questions and comments that were useful to advance my research up to this stage.

There is more work and further research to be done in the field of strategic alliances; I anticipate that this thesis will be a stepping-stone to developing the research agenda that could advance our understanding of the performance of strategic alliances.

REFERENCES

- AKINTOYE, A. & MAIN, J. 2007. Collaborative relationships in construction: The UK contractors' perception. *Engineering, Construction and Architectural Management*, 14, 597-617.
- ALBERS, S., WOHLGEZOGEN, F. & ZAJAC, E. J. 2013. Strategic Alliance Structures: An Organization Design Perspective. *Journal of Management*.
- ALMANDOZ, J. 2012. Arriving At The Starting Line: The Impact Of Community And Financial Logics On New Banking Ventures. *Academy of Management Journal*, 55, 1381-1406.
- ANAND, B. N. & KHANNA, T. 2000. Do firms learn to create value? The case of alliances. *Strategic Management Journal*, 21, 295-315.
- ANDERSON, E. 1990. Two Firms, One Frontier: On Assessing Joint Venture Performance. *Sloan Management Review*, 31, 19.
- ANDERSON, S., CHRIST, M. H., DEKKER, H. C., & SEDATOLE, K. L. (2013). The use of management controls to mitigate risk in strategic alliances: Field and survey evidence. *Journal of Management Accounting Research*.
- ARIÑO, A. 2003. Measures of strategic alliance performance: an analysis of construct validity. *J Int Bus Stud*, 34, 66-79.
- ARIÑO, A. & DE LA TORRE, J. 1998. Learning from Failure: Towards an Evolutionary Model of Collaborative Ventures. *Organization Science*, 9, 306-325.
- ARNDT, J. 1979. Toward A Concept Of Domesticated Markets. *Journal of Marketing*, 43, 69-75.
- BAMFORD, J. D., GOMES-CASSERES, B. R., MICHAEL S.; & DAWSON, B. 2003. *Mastering alliance strategy : a comprehensive guide to design, management, and organization*, Jossey-Bass.
- BARKEMA, H. G., SHENKAR, O., VERMEULEN, F. & BELL, J. H. J. 1997. Working Abroad, Working With Others: How Firms Learn To Operate International Joint Ventures. *Academy of Management Journal*, 40, 426-442.
- BARNEY, J. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17, 99.
- BEAMISH, P. W. 1987. Joint Ventures in LDCs: Partner Selection and Performance. *Management International Review*, 27, 23-37.
- BEAMISH, P. W. & JUNG, J. 2005. The performance and survival of joint ventures with parents of asymmetric size. *International Management*, 10.
- BEAMISH, P. W. & KACHRA, A. 2004. Number of partners and JV performance. *Journal of World Business*, 39, 107-120.
- BEAMISH, P. W. & LUPTON, N. C. 2009. Managing Joint Ventures. *The Academy of Management Perspectives*, 23, 75-94.
- BLAIKIE, N. W. H. 2009. *Designing social research : the logic of anticipation*, Polity Press.
- BLEEKE, J. & ERNST, D. 1991. The Way to Win in Cross-Border Alliances. *Harvard Business Review*, 69, 127-135.
- BORYS, B. & JEMISON, D. B. 1989. Hybrid Arrangements as Strategic Alliances: Theoretical Issues in Organizational Combinations. *Academy of Management Review*, 14, 234-249.
- BOWMAN, G., MACKAY, R. B., MASRANI, S. & MCKIERNAN, P. 2013. Storytelling and the scenario process: Understanding success and failure. *Technological Forecasting and Social Change*, 80, 735-748.

- BP 2015. BP Energy Outlook 2035. In: BP (ed.) *Energy Outlook*. British Petroleum.
- BROUTHERS, K. D. & BAMOSSY, G. J. 2006. Post-Formation Processes in Eastern and Western European Joint Ventures*. *Journal of Management Studies*, 43, 203-229.
- BUCKLEY, P. J. (1992). 'Alliances, technology and markets: a cautionary tale'. In Buckley, P. J. *Studies in International Business*. London: Macmillan
- BUCKLEY, P. J., GLAISTER, K. W., KLIJN, E. & TAN, H. 2009. Knowledge accession and knowledge acquisition in strategic alliances: The impact of supplementary and complementary dimensions. *British Journal of Management*, 20, 598-609.
- BURNARD, P., GILL, P., STEWART, K., TREASURE, E., CHADWICK, B 2008. Analysing and presenting qualitative data. *BDJ*, 204, 429.
- CALLAHAN, J. & MACKENZIE, S. 1999. Metrics for strategic alliance control. *R and D Management*, 29, 365-376.
- CAVES, R. E. Industrial organization, corporate strategy and structure, *Journal of Economics Literature* 58, 1980, pp. 64-92
- CHAN, S. H., KENSINGER, J. W., KEOWN, A. J. & MARTIN, J. D. 1997. Do strategic alliances create value? *Journal of Financial Economics*, 46, 199-221.
- CHANDLER, A. D. 1977. *The visible hand : the managerial revolution in American business*, Harvard University Press.
- CHRISTOFFERSEN, J. 2013. A Review of Antecedents of International Strategic Alliance Performance: Synthesized Evidence and New Directions for Core Constructs. *International Journal of Management Reviews*, 15, 66-85.
- COMBS, J. G. & KETCHEN, D. J. 2003. Why Do Firms Use Franchising as an Entrepreneurial Strategy?: A Meta-Analysis. *Journal of Management*, 29, 443-465.
- COMBS, J. G., KETCHEN, D. J., SHOOK, C. L., & SHORT, J. C. (2011). Antecedents and consequences of franchising: Past accomplishments and future challenges. *Journal of Management*, 37, 99-126.
- COMBS, J. G., MICHAEL, S. C. & CASTROGIOVANNI, G. J. 2004. Franchising: A Review and Avenues to Greater Theoretical Diversity. *Journal of Management*, 30, 907-931.
- COMMONS, J. R. 1931. Institutional Economics. *The American Economic Review*, 21, 648-657.
- CONTRACTOR, F. J. & LORANGE, P. 1988. *Cooperative strategies in international business : joint ventures and technology partnerships between firms*, Lexington, M.A., Lexington Books.
- CORLEY, K. G. & GIOIA, D. A. 2011. Building Theory about Theory Building: What Constitutes a Theoretical Contribution? *Academy of Management Review*, 36, 12-32.
- COSTA E SILVA, S., BRADLEY, F., & SOUSA, C. M. P. (2012). Empirical test of the trust – Performance link in an international alliances context. *International Business Review*, 21, 293-306.
- CULPAN, R. 2009. A fresh look at strategic alliances : research issues and future directions. *International journal of strategic business alliances*, 1, 4-23.
- CUMMINGS, J. L. & HOLMBERG, S. R. 2012. Best-fit Alliance Partners: The Use of Critical Success Factors in a Comprehensive Partner Selection Process. *Long Range Planning*, 45, 136-159.
- DACIN, M. T., HITT, M. A. & LEVITAS, E. 1997. Selecting Partners for Successful International Alliances: Examination of U.S. and Korean Firms. (cover story). *Journal of World Business*, 32, 3-16.

- DACIN, M. T., OLIVER, C. & ROY, J.-P. 2007. The legitimacy of strategic alliances: an institutional perspective. *Strategic Management Journal*, 28, 169-187.
- DAS, T. K. & TENG, B. S. 1999. Managing risks in strategic alliances. *Academy of Management Executive*, 13, 50-62.
- DAS, T. K., & TENG, B.-S. 2001. Trust, control, and risk in strategic alliances: An integrated framework. *Organization Studies*, 22, 251-283.
- DAS, T. K. & TENG, B. S. 2002. Alliance Constellations: a Social Exchange Perspective. *Academy of Management Review*, 27, 445-456.
- DATTA, D. K., MUSTEEN, M., & HERRMANN, P. 2009. Board characteristics, managerial incentives, and the choice between foreign acquisitions and international joint ventures. *Journal of Management*, 35, 928-953.
- DEKKER, H. C. 2004. Control of inter-organizational relationships: Evidence on appropriation concerns and coordination requirements. *Accounting, Organizations and Society*, 29, 27-49.
- DENSCOMBE, M. & DAWSON, B. 2007. *The good research guide : for small-scale social research projects*, Open University Press.
- DEVELOPMENT, M. O. E. A. M. 2015. *Government Incorporates the National Oil Company (NOC)* [Online]. Available: <http://www.petroileum.go.ug/news/38/Government-Incorporates-the-National-Oil-Company-NOC> [Accessed 05/08/15].
- DEVLIN, G. & BLEACKLEY, M. 1988. Strategic alliances—Guidelines for success. *Long Range Planning*, 21, 18-23.
- DIMAGGIO, P. J. & POWELL, W. W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48, 147-160.
- DOZ, Y. L. 1988. From intent to outcome: a process framework for partnerships. *ENSEAD*.
- DOZ, Y. L. 1996. The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal*, 17, 55-83.
- DOZ, Y. L., OLK, P. M. & RING, P. S. 2000. Formation processes of R&D consortia: which path to take? Where does it lead? *Strategic Management Journal*, 21, 239-266.
- DYER, J. H., & HATCH, N. W. 2006. Relation-specific capabilities and barriers to knowledge transfers: Creating advantage through network relationships. *Strategic Management Journal*, 27, 701-719.
- DUBIN, H. 2005. When competing means coming together, what makes partnerships work. Available: http://www.jmw.com/library_article_competing.asp.
- DUSSAUGE, P. & GARRETTE, B. 1995. Determinants of Success in International Strategic Alliances: Evidence from The Global Aerospace Industry. *Journal of International Business Studies*, 26, 505-530.
- DUSSAUGE, P., GARRETTE, B. & MITCHELL, W. 2000. Learning from competing partners: outcomes and durations of scale and link alliances in Europe, North America and Asia. *Strategic Management Journal*, 21, 99-126.
- DUSSAUGE, P., GARRETTE, B. & MITCHELL, W. 2004. Asymmetric performance: The market share impact of scale and link alliances in the global auto industry. *Strategic Management Journal*, 25, 701-711.
- DUVAL, C., ANDERSON, O. L., BISHOP, R. D., BOWMAN, J. P. & BLINN, K. W. 2009. *International petroleum exploration and exploitation agreements : legal, economic & policy aspects*, Barrows.

- EISENHARDT, K. M. & MARTIN, J. A. 2000. Dynamic capabilities: what are they? *Strategic Management Journal*, 21, 1105-1121.
- EISENHARDT, K. M. & SCHOONHOVEN, C. B. 1996. Resource-based View of Strategic Alliance Formation: Strategic and Social Effects in Entrepreneurial Firms. *Organization Science*, 7, 136-150.
- ERNST & YOUNG 2011. Navigating Joint Ventures in the Oil and Gas Industry.
- ERNST, D. 2003. Envisioning collaboration. *Mastering alliance strategy : a comprehensive guide to design, management, and organization*. Jossey-Bass.
- FLICK, U. 2014. *An introduction to qualitative research*, London, London : Sage.
- FRIEDLAND, R. & ALFORD, R. R. 1991. *Bringing Society Back In: Symbols, Practices, and Institutional Contradictions*.
- FRIEDMANN, W. G. & KALMANOFF, G. 1961. Joint International business ventures. *The International Executive*, 3, 1-4.
- GERINGER, J. M. & HERBERT, L. 1991. Measuring Performance Of International Joint Ventures. *Journal of International Business Studies*, 22, 249-264.
- GLAISTER, K. W. & BUCKLEY, P. J. 1996. Strategic motives for international alliance formation. *Journal of Management Studies*, 33, 301-332.
- GLAISTER, K.W. AND BUCKLEY, P.J. 1999. Performance relationships in UK international alliances. *Management International Review (MIR)*, 39, pp. 123–147.
- GLAISTER, K. W., HUSAN, R. & BUCKLEY, P. J. 2003. Decision-making Autonomy in UK International Equity Joint Ventures. *British Journal of Management*, 14, 305-322.
- GOMES, E., BARNES, B. R. & MAHMOOD, T. 2014. A 22 year review of strategic alliance research in the leading management journals. *International Business Review*.
- GOMES-CASSERES, B. 1987. Joint Venture Instability: Is it a problem? *Columbia Journal of World Business*.
- GOODSON, P. 2013. *Becoming an Academic Writer 50 Exercises for Paced, Productive, and Powerful Writing* SAGE Publications, Inc
- GROOT, T. L. C. M. & MERCHANT, K. A. 2000. Control of international joint ventures. *Accounting, Organizations and Society*, 25, 579-607.
- GULATI, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal*, 38(1), 85–112.
- GULATI, R. 1998. Alliances and networks. *Strategic Management Journal*, 19, 293-317.
- GULATI, R., NOHRIA, N. & ZAHEER, A. 2000. Strategic networks. *Strategic Management Journal*, 21, 203-215.
- GULATI, R. & SINGH, H. 1998. The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances. *Administrative Science Quarterly*, 43, 781-814.
- GULATI, R., SYTCH, M. & MEHROTRA, P. 2008. Breaking Up is Never Easy: Planning For Exit In A Strategic Alliance. *California Management Review*, 50, 147-163.
- GULATI, R. & WESTPHAL, J. D. 1999. Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. *Administrative Science Quarterly*, 44, 473-506.
- GULATI, R., WOHLGEZOGEN, F. & ZHELYAZKOV, P. 2012. The Two Facets of Collaboration: Cooperation and Coordination in Strategic Alliances. *The Academy of Management Annals*, 6, 531-583.
- GULBRANDSEN, L. H. & MOE, A. 2005. Oil Company CSR Collaboration in 'New' Petro-States. *Journal of Corporate Citizenship*, 52-64.

- HAMEL, G. (1991). Competition for Competence and Interpartner Learning Within International Strategic Alliances," *Strategic Management Journal*, 12,83-103
- HARRIGAN, K. R. 1988. Joint Ventures: A mechanism for Creating Strategic Change. *The Management of Strategic Change*. Basil Blackwell.
- HARRIGAN, K. R. 2015. Strategic Alliances as Agent of Competitive Change. *Collaborative Strategy: A Guide to Strategic Alliances*. Northampton: Edward Elgar.
- HART, C. 1998. *Doing a literature review : releasing the social science research imagination*, Sage.
- HATFIELD, L., II, J. A. P., SLEETH, R. G. & PITTS, M. W. 1998. Toward Validation of Partner Goal Achievement as a Measure of Joint Venture Performance. *Journal of Managerial Issues*, 10, 355-372.
- HENNART, J.-F. 1988. A transaction costs theory of equity joint ventures. *Strategic Management Journal*, 9, 361-374.
- HERON, J. 1996. *Co-operative inquiry : research into the human condition*, Sage Publications.
- HILLEBRAND, B. & BIEMANS, W. G. 2003. The relationship between internal and external cooperation: literature review and propositions. *Journal of Business Research*, 56, 735-743.
- HOFFMANN, W. H. 2007. Strategies for managing a portfolio of alliances. *Strategic Management Journal*, 28, 827-856.
- HOFSTEDE, G. 1980. Culture's consequences: International differences in work-related values. *Culture's Consequences: International Differences in Work-related Values*.
- HONG, R., GRAY, B. & KIM, K. 2009. Performance of International Joint Ventures: What Factors Really Make a Difference and How? *Journal of Management*, 35, 805-832.
- IFP 2004. *Oil and gas exploration and production : reserves, costs, contracts*, Editions Technip.
- INKPEN, A. C. (2008). Knowledge transfer and international joint ventures: The case of NUMMI and general motors. *Strategic Management Journal*, 29, 447-453.
- INKPEN, A. C. & BEAMISH, P. W. 1997. Knowledge, Bargaining Power, And The Instability Of International Joint Ventures. *Academy of Management Review*, 22, 177-202.
- INKPEN, A. C. & CURRALL, S. C. 2004. The Coevolution of Trust, Control, and Learning in Joint Ventures. *Organization Science*, 15, 586-599.
- INTERNATIONAL ENERGY, A., VAN DER HOEVEN, M. & PRIDDLE, R. 2014. World energy outlook 2014, International Energy Agency.
- JANIS, I. L. (1982). Groupthink: Psychological Studies of Policy Decisions and Fiascos, 2nd edition. Boston, MA: Houghton Mifflin.
- JIANG, X., LI, Y. & GAO, S. 2008. The stability of strategic alliances: Characteristics, factors and stages. *Journal of International Management*, 14, 173-189.
- KALE, P., & SINGH, H. 2007. Building firm capabilities through learning: The role of the alliance learning process in alliance capability and firm-level alliance success. *Strategic Management Journal*, 28, 981-1000.
- KALE, P. & SINGH, H. 2009. Managing Strategic Alliances: What Do We Know Now, and Where Do We Go From Here? *Academy of Management Perspectives*, 23, 45-62.
- KALE, P., SINGH, H., & PERLMUTTER, H. 2000. Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management Journal*, 21, 217-237.

- KATILA, R., ROSENBERGER, J. D. & EISENHARDT, K. M. 2008. Swimming with Sharks: Technology Ventures, Defense Mechanisms and Corporate Relationships. *Administrative Science Quarterly*, 53, 295-332.
- KENT, D. H. H., DON 1991. A Longitudinal Comparative Study Of Two Joint Ventures. *Journal of Management Studies*, 28, 253-265.
- KILLING, J. P. 1983. *Strategies for joint venture success*, Croom Helm.
- KILLING, J. P. 1988. Understanding Alliances: The Role of Task and Organizational Complexity. *Cooperative strategies in international business : joint ventures and technology partnerships between firms*. Lexington, M.A.: Lexington Books.
- KIM, J. & PARKHE, A. 2009. Competing and cooperating similarity in global strategic alliances: An exploratory examination. *British Journal of Management*, 20, 363-376.
- KLAG, M. & LANGLEY, A. 2013. Approaching the Conceptual Leap in Qualitative Research. *International Journal of Management Reviews*, 15, 149-166.
- KOGUT, B. 1988. Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9, 319-332.
- KOGUT, B. (1989). The stability of joint ventures: reciprocity and competitive rivalry. *Journal of Industrial Economics*, 38, 183-98.
- KOKA, B. R., & PRESCOTT, J. E. 2008. Designing alliance networks: The influence of network position, environmental change, and strategy on firm performance. *Strategic Management Journal*, 29, 639-661.
- KRISHNAN, R., MARTIN, X. & NOORDERHAVEN, N. G. 2006. When does Trust Matter to Alliance Performance? *Academy of Management Journal*, 49, 894-917.
- KUMAR, R. & NTI, K. O. 1998. Differential Learning and Interaction in Alliance Dynamics: A Process and Outcome Discrepancy Model. *Organization Science*, 9, 356-367.
- LAHIRI, N. & NARAYANAN, S. 2013. Vertical integration, innovation, and alliance portfolio size: Implications for firm performance. *Strategic Management Journal*, 34, 1042-1064.
- LANGFIELD-SMITH, K. 2008. The relations between transactional characteristics, trust and risk in the start-up phase of a collaborative alliance. *Management Accounting Research*, 19, 344-364.
- LANGLEY, A. 1999. Strategies for Theorizing from Process Data. *Academy of Management Review*, 24, 691-710.
- LANGLEY, A., SMALLMAN, C., TSOUKAS, H. & VAN DE VEN, A. H. 2013. Process Studies of Change in Organization and Management: Unveiling Temporality, Activity, and Flow. *Academy of Management Journal*, 56, 1-13.
- LARSSON, R., BENGTSSON, L., HENRIKSSON, K. & SPARKS, J. 1998. The Interorganizational Learning Dilemma: Collective Knowledge Development in Strategic Alliances. *Organization Science*, 9, 285-305.
- LEE, H., KIM, D. & SEO, M. 2013. Market valuation of marketing alliances in East Asia: Korean evidence. *Journal of Business Research*, 66, 2492-2499.
- LEE, J.-W., ABOSAG, I., & KWAK, J. 2012. The role of networking and commitment in foreign market entry process: Multinational corporations in the Chinese automobile industry. *International Business Review*, 21, 27-39.
- LEI, D. T. 1997. Competence-building, technology fusion and competitive advantage: The key roles of organizational learning and strategic alliances. *International Journal of Technology Management*, 14, 208-237.

- LI, J., XIN, K. & PILLUTLA, M. 2002. Multi-cultural leadership teams and organizational identification in international joint ventures. *The International Journal of Human Resource Management*, 13, 320-337.
- LIU, C. L. E. 2012. An investigation of relationship learning in cross-border buyer–supplier relationships: The role of trust. *International Business Review*, 21, 311–327.
- LOWEN, A. AND POPE, J. 2008. Survival analysis of international joint venture relationships. *Journal of Business & Economic Studies*, 14, pp. 62–80.
- LUI, S. S., & NGO, H.-Y. 2012. Drivers and outcomes of long-term orientation in cooperative relationships. *British Journal of Management*, 23, 80–95.
- LUO, Y. 2001. Antecedents and consequences of personal attachment in cross-cultural cooperative ventures. *Administrative Science Quarterly*, 46, 177-201.
- LUO, Y. 2005. How important are shared perceptions of procedural justice in cooperative alliances? *The Academy of Management Journal*, 48, 695–709.
- LUO, Y. 2008. Procedural fairness and interfirm cooperation in strategic alliances. *Strategic Management Journal*, 29, 27–46.
- LYONS, M. P. 1991. Joint-ventures as strategic choice—A literature review. *Long Range Planning*, 24, 130-144.
- MAINELA, T. & PUHAKKA, V. 2008. Embeddedness and networking as drivers in developing an international joint venture. *Scandinavian Journal of Management*, 24, 17-32.
- MAKINO, S. & BEAMISH, P. W. 1998. Performance and Survival of Joint Ventures with Non-Conventional Ownership Structures. *Journal of International Business Studies*, 29, 797-818.
- MAKINO, S., CHAN, C.M., ISOBE, T. AND BEAMISH, P.W. (2007). Intended and unintended termination of international joint ventures. *Strategic Management Journal*, 28, pp. 1113–1132.
- MARKET HOUSE BOOKS, L. 1998. *The Oxford dictionary for international business*, Oxford University Press.
- MCCUTCHEN, W.W., SWAMIDASS, P.M. AND TENG, B.S. (2008). Strategic alliance termination and performance: the role of task complexity, nationality, and experience. *Journal of High Technology Management Research*, 18, pp. 191– 202.
- MEIER, M. 2011. Knowledge Management in Strategic Alliances: A Review of Empirical Evidence. *International Journal of Management Reviews*, 13, 1-23.
- MILES, M. B. & HUBERMAN, A. M. 1994. *Qualitative data analysis : an expanded sourcebook*, Sage.
- MIN, J., & MITSUHASHI, H. 2012. Dynamics of unclosed triangles in alliance networks: Disappearance of brokerage positions and performance consequences. *Journal of Management Studies*, 49, 1078–1108.
- MUDAMBI, S. M., & TALLMAN, S. 2010. Make, buy or ally?. Theoretical perspectives on knowledge process outsourcing through alliances. *Journal of Management Studies*, 47, 1434–1456.
- MÖLLERING, G. 2012. Process Views of Trusting and Crises.
- NIELSEN, B. B., & GUDERGAN, S. 2012. Exploration and exploitation fit and performance in international strategic alliances. *International Business Review*, 21, 558–574.
- NIPPA, M., BEECHLER, S. & KLOSSEK, A. 2007. Success Factors for Managing International Joint Ventures: A Review and an Integrative Framework. *Management and Organization Review*, 3, 277-310.

- OLIVER, C. 1990. Determinants of Interorganizational Relationships: Integration and Future Directions. *Academy of Management Review*, 15, 241-265.
- OLK, P. 2006. *Modeling and Measuring the Performance of Alliances. Handbook of Strategic Alliances.*, Thousand Oaks, CA, SAGE Publications, Inc.
- PARK, C. V., & LEE, I. C. 2012. Korean international joint ventures: How the exchange climate affects tacit knowledge transfer from foreign parents. *International Marketing Review*, 29, 151-174.
- PARK, N. K., MEZIAS, J. M. & SONG, J. 2004. A Resource-based View of Strategic Alliances and Firm Value in the Electronic Marketplace. *Journal of Management*, 30, 7-27.
- PARK, S. H. & UNGSON, G. R. 1997. The Effect of National Culture, Organizational Complementarity, and Economic Motivation on Joint Venture Dissolution. *Academy of Management Journal*, 40, 279-307.
- PARKHE, A. 1993a. "Messy" Research, Methodological Predispositions, and Theory Development in International Joint Ventures. *Academy of Management Review*, 18, 227-268.
- PARKHE, A. 1993b. Strategic Alliance Structuring: a Game Theoretic and Transaction Cost Examination of Interfirm Cooperation. *Academy of Management Journal*, 36, 794-829.
- PARMIGIANI, A. & RIVERA-SANTOS, M. 2011. Clearing a Path Through the Forest: A Meta-Review of Interorganizational Relationships. *Journal of Management*, 37, 1108-1136.
- PETROVIC, J. & KAKABADSE, A. K., NADA, K. 2006. International joint venture (IJV) directors' contribution to board effectiveness. *Management Decision*, 44, 346-366.
- PETTIGREW, A. M. 1997. What is a processual analysis? *Scandinavian Journal of Management*, 13, 337-348.
- PETTIGREW, A., MASSINI, S. & NUMAGAMI, T. 2000. Innovative forms of organising in Europe and Japan. *European Management Journal*, 18, 259-273.
- PFEFFER, J. & SALANCIK, G. R. 1978. *The external control of organizations : a resource dependence perspective*, New York :, Harper & Row.
- PFEFFER, J. & SALANCIK, G. R. 2003. *The external control of organizations : a resource dependence perspective*, Stanford University Press.
- PORTER, M. E. 1985. *Competitive advantage : creating and sustaining superior performance*, Free Press.
- PORTER, M. E. 1986. *Competition in global industries*, Harvard Business School Press.
- POULIS, K., YAMIN, M., & POULIS, E. 2012. Domestic firms competing with multinational enterprises: The relevance of resource-accessing alliance formations. *International Business Review*, 21, 588-601.
- POWELL, W. W. & DIMAGGIO, P. J. 1991. *The New Institutionalism in Organizational Analysis*, USA, The University of Chicago
- REN, H., GRAY, B. & KIM, K. 2009. Performance of International Joint Ventures: What Factors Really Make a Difference and How? *Journal of Management*, 35, 805-832.
- REUER, J. J., KLIJN, E. & LIOUKAS, C. S. 2014. Board involvement in international joint ventures. *Strategic Management Journal*, 35, 1626-1644.
- REUER, J. J., ZOLLO, M. & SINGH, H. 2002. Post-formation dynamics in strategic alliances. *Strategic Management Journal*, 23, 135-151.
- RING, P. S. & VAN DE VEN, A. H. 1994. Developmental processes of cooperative interorganizational relationships. *Academy of Management Review*, 19, 90-118.

- RIPOLLE'S, M., BLESAS, A., & MONFERRER, D. 2012. Factors enhancing the choice of higher resource commitment entry modes in international new ventures. *International Business Review*, 21, 648–666.
- ROBSON, M. J. & LEONIDOU, L. C. K., CONSTANTINE S. 2002. Factors Influencing International Joint Venture Performance: Theoretical Perspectives, Assessment, and Future Directions. *MIR: Management International Review*, 42, 385-418.
- ROBSON, M. J., SKARMEAS, D. & SPYROPOULOU, S. 2006. Behavioral attributes and performance in international strategic alliances. *International Marketing Review*, 23, 585-609.
- ROY, J.-P. 2012. IJV Partner Trustworthy Behaviour: The Role of Host Country Governance and Partner Selection Criteria. *Journal of Management Studies*, 49, 332-355.
- SAMPSON, A. 1991. *The Seven Sisters*, New York, NY, Bantam.
- SAUNDERS, M., LEWIS, P., THORNHILL, A. & DAWSON, B. 2012. *Research methods for business students*, Pearson.
- SAXTON, T. (1997). The effects of partner and relationship characteristics on alliance outcomes. *Academy of Management Journal*, 40, pp. 443–461.
- SEKARAN, U. & BOUGIE, R. 2013. *Research methods for business : a skill-building approach*, Wiley.
- SHAH, R. H. & SWAMINATHAN, V. 2008. Factors influencing partner selection in strategic alliances: the moderating role of alliance context. *Strategic Management Journal*, 29, 471-494.
- SHANE, S. A. 1998. Making new franchise systems work. *Strategic Management Journal*, 19, 697–707.
- SHELL. 2014. *Major projects* [Online]. Available: <http://www.shell.com>.
- SHENKAR, O., & LI, J. (1999). Knowledge search in international cooperative ventures. *Organization Science*, 10, 134–143.
- SHENKAR, O. & ZEIRA, Y. 1992. Role Conflict and Role Ambiguity of Chief Executive Officers in International Joint Ventures', *Journal of International Business Studies*, 2: 55–75.
- SHI, W., SUN, J. & PRESCOTT, J. E. 2012. A Temporal Perspective of Merger and Acquisition and Strategic Alliance Initiatives: Review and Future Direction. *Journal of Management*, 38, 164-209.
- SILVERMAN, D., 2011. *Interpreting Qualitative Data*. 4th Edition. Sage.
- SILVERMAN, D. 2013. *Doing qualitative research*, SAGE Publications Ltd.
- SIMONIN, B. L. 2004. An empirical investigation of the process of knowledge transfer in international strategic alliances. *Journal of International Business Studies*, 35, 407–427.
- SLATER, S. & ROBSON, M. J. 2012. Social capital in Japanese-Western alliances: Understanding cultural effects. *International Marketing Review*, 29, 6-23.
- STETTNER, U., & LAVIE, D. 2013. Ambidexterity under scrutiny: Exploration and exploitation via internal organization, alliances, and acquisitions. *Strategic Management Journal*
<http://onlinelibrary.wiley.com/doi/10.1002/smj.2195/abstract;jsessionid=13254AEE86896986E7648AB5F1A03C56.f03t03?deniedAccessCustomised-Message=&userIsAuthenticated=false>.
- STONEHOUSE, G. & SNOWDON, B. 2007. Competitive Advantage Revisited: Michael Porter on Strategy and Competitiveness. *Journal of Management Inquiry*, 16, 256-273.

- STRAUSS, A. AND CORBIN, J., 1990. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage.
- STREET, C. T. & CAMERON, A.-F. 2007. External Relationships and the Small Business: A Review of Small Business Alliance and Network Research. *Journal of Small Business Management*, 45, 239-266.
- SUDDABY, R. 2006. From the Editors: What Grounded Theory is Not. *Academy of Management Journal*, 49, 633-642.
- SUEN, W. W. 2002. Alliance strategy and the fall of Swissair. *Journal of Air Transport Management*, 8, 355-363.
- THOMAS, K. W. 1976. Conflict and Conflict Management, in M. Dunnette (Ed.), Handbook of industrial and Organizational Psychology. Chicago, IL: Rand McNally, 889-935.
- THORNTON, P. H. & OCASIO, W. 1999. Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958-1990. *American Journal of Sociology*, 105, 801-843.
- THORNTON, P. H., OCASIO, W. & LOUNSBURY, M. 2012. *The Institutional Logics Perspective: A New Approach to Culture, Structure and Process*, Oxford University Press.
- TOMLINSON, J. W. C. 1970. *The joint venture process in international business : India and Pakistan*, M.I.T. Press.
- TRANFIELD, D., DENYER, D. & SMART, P. 2003. Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 14, 207-222.
- VAN DE VEN, A. H., & WALKER, G. 1984. The dynamics of interorganizational coordination. *Administrative Science Quarterly*, 29: 598-621.
- VAN GRONDELLE, M. 2012. Effective partnerships and joint ventures in unconventional gas.
- VAPOLA, T. J., PAUKKU, M. & GABRIELSSON, M. 2010. Portfolio management of strategic alliances: An international business perspective. *International Business Review*, 19, 247-260.
- VARADARAJAN, P. R. & CUNNIGHAM, M. H. 1995. Strategic Alliances: A Synthesis of Conceptual Foundations. *Journal of the Academy of Marketing Science*, 23, 282-296.
- VARIOUS. 2012. Unconventional Gas Aberdeen 2012 Conference. In: COUNCIL, A. C., ed., 2012 Aberdeen, UK. Aberdeen, UK.
- VOSER, P. 2013. World National Oil Companies Conference. London, UK.
- WALTER, J., LECHNER, C. & KELLERMANN, F. W. 2008. Disentangling alliance management processes: Decision making, politicality, and alliance performance. *Journal of Management Studies*, 45, 530-560.
- WASSMER, U. 2010. Alliance Portfolios: A Review and Research Agenda. *Journal of Management*, 36, 141-171.
- WERNERFELT, B. 1984. A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
- WHIPP, R. & PETTIGREW, A. 1992. Managing Change for Competitive Success: Bridging the Strategic and the Operational. *Industrial and Corporate Change*, 1, 205-233.
- WILLIAMSON, O. E. 1981. The Economics of Organization: The Transaction Cost Approach. *American Journal of Sociology*, 87, 548-577.

- WOOD, I. 2014. UKCS Maximising Recovery Review: Final Report.
- XIA, J. 2011. Mutual dependence, partner substitutability, and repeated partnership: The survival of cross-border alliances. *Strategic Management Journal*, 32, 229–253.
- YAN, A. & ZENG, M. 1999. International joint venture instability: a critique of previous research, a reconceptualization, and directions for future research. *Journal of International Business Studies*, 30, 397–414.
- YEHESEKEL, O., ZEIRA, Y., SHENKAR, O. AND NEWBURRY, W. 2001. Parent company dissimilarity and equity international joint venture effectiveness. *Journal of International Management*, 7, pp. 81–104.
- YERGIN, D. 2012. *The Prize*, Great Britain, Simon & Schuster UK Ltd.
- YU, T., SUBRAMANIAM, M., & CANNELLA, A. A., JR. 2013. Competing globally, allying locally: Alliances between global rivals and host-country factors. *Journal of International Business Studies*, 44, 117–137.
- ZUCKER, L. G. 1977. The role of institutionalization in culture persistence. *American Sociological Review*. 42: 726–743.

APPENDICES

Chapter 3

Appendix 3-1.- Research questions development process details

Question	Topic	Social Research Purpose
What is going to happen in the future with Strategic alliances in the energy sector?	Change	Understand
What are possible solutions to make SAs perform better??	Change	Understand
Why strategic alliances are important in the energy sector?	Concept	Understand
What is a strategic alliance?	Concept	Understand
What are the types of strategic alliances?	Concept	Understand
What are the pros and cons of each type of strategic alliance??	Concept	Understand
What is the process to develop a strategic alliance in a company? (Is it different between private-private vs private-state companies?) (Look for flexibility)	Decision	Understand
How is assessed the convenience to develop a SA?	Decision	Understand
How are decisions made for the different stages of the SA?	Decision	Understand
How are decisions made to enter or not into a strategic alliance?	Decision	Understand
How is considered the context (economical, political, social...) when developing a SA? (Look at the relation with Host-Governments)	Influence	Understand
What are the external constraints that influence their perspective?	Influence	Understand
How can people involve in Strategic alliances help to make them better?	Influence	Understand
Why do companies enter into strategic alliances?	Motives	Understand
Which are the motives to get into a strategic alliance?	Motives	Understand
What is the criteria to partner? (or develop project/business alone)	Partner	Understand
How is developed the selection of a partner?	Partner	Understand
What are the main characteristics for selecting a partner?	Partner	Understand
How are performance indicators established and measured? (Can they change over time?)	Performance	Understand
Why do strategic alliances succeed or fail?	Performance	Understand
What are the risks of strategic alliances??	Performance	Understand
How to measure performance of a strategic alliance?	Performance	Understand
What are the critical factors while developing a strategic alliance?	Performance	Understand
What factors are the main determinants of success or failure?	Performance	Understand
How many stages in the strategic alliance process are considered?	Process	Understand
How is conducted the learning process during the operation of a SA?	Process	Understand
How is this learning process transferred to other SAs in the company? How and when?	Process	Understand
How is a portfolio of SAs managed?	Process	Understand
What are the main problems in a Strategic alliance?	Process	Understand
What are the main challenges??	Process	Understand
How is the communication process developed in the SAs?	Process	Understand
How is the decision process developed?	Process	Understand
How is taken in consideration the natural evolution and change of the SAs in the contracts?	Process	Understand
How is organised a company to analyse/assess strategic alliances? (Do the company has a special area in charge of the strategic alliance process or is it hired a third party?)	Structure	Understand
How is structured the company (upstream, downstream) is there a difference in the way SAs are developed among the different business units??	Structure	Understand
How is designed the structure of a strategic alliance? (at different stages)	Structure	Understand

Appendix 3-2.- Participant information Sheet

TITLE OF PROJECT:

***STRATEGIC ALLIANCES IN THE ENERGY SECTOR;
‘UNDERSTANDING PERFORMANCE AMONG STRATEGIC
ALLIANCES IN THE ENERGY SECTOR FROM THE PERSPECTIVE OF
PROCESS THEORIES OF CHANGE’***

INVITATION TO TAKE PART IN A RESEARCH STUDY

You are being asked to take part in a research study, the **purpose of which is** to understand performance among strategic alliances in the energy sector by collecting the experiences and perspectives of key individuals working or who have worked in strategic alliances in the sector. I am a PhD candidate from the University of Dundee, sponsored by Pemex (The National Oil Company from Mexico). My supervisors are Professor Graeme Martin and Doctor Ian Robson.

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate a consent form is attached, please complete it and return it to me (directly, by post or electronically). However, if you decide not to take part I thank you for considering my request.

PURPOSE OF THE RESEARCH STUDY

Strategic alliances are a method of collaboration among energy firms that is becoming increasingly popular. However, the failure rate for such collaborations is high, sometimes estimated at 70%. Despite this, the reasons for failure are not well understood. Thus, the purpose of this research is to help fill this gap by investigating factors underlying failure and success among strategic alliances as understood by those who have been involved in one way or another in these collaborations.

Your participation would assist me greatly in achieving the purpose of this research. Participation in this study is voluntary and you would not receive any remuneration or reward. However, it will also be of benefit to you because you will have access to the findings from this project.

Participants have been selected to take part in the study on the basis that they have been directly involved in a strategic alliance in the energy sector. You have been invited on the basis that you are or have been deeply involved with strategic alliances.

TIME COMMITMENT

You will be asked to take part in an interview, face to face or by telephone/Skype, and/or focus group, which will take between 1-2 hours at a convenient location to be determined.

The purpose of the interview is to gain an in depth understanding of your experiences, positive and negative about participating in strategic alliances, whereas the focus groups would be used to follow up on key themes arising from individual interviews concerning strategic alliances, this would be done at a later stage of this project. The focus group would be developed among members of the same organization, and could have as many as 8 participants. You would be given the option of participating in one of them or both (interview and/or focus group).

TERMINATION OF PARTICIPATION

You may decide to withdraw from the research study at any time without explanation.

RISKS

I am unaware of any risks for you in this study, but I invite you to raise any concerns you have directly with me.

CONFIDENTIALITY/ANONYMITY

The researcher will take notes of the meetings, and will audio tape them, but the tapes will be used only to confirm the notes taken. A Transcriptions Service use by the School would make the transcriptions. Notes, tapes and transcriptions will be stored securely in password-protected computer, and will be destroyed after the conclusion of the project.

The data we collect do not contain any personal information about you. Everything that you say during the interview and/or focus group would be kept anonymous.
No one will link the data you provided to your identity and name.

FOR FURTHER INFORMATION ABOUT THIS RESEARCH STUDY

I will be glad to answer your questions about this study at any time.

If you have any questions about this research, either now or in the future, please feel free to contact either myself or my Supervisors:

Joaquin Figueroa Gallardo

Carnegie Building
University of Dundee
Nethergate
Dundee
DD1 4HN

j.r.figueroagallardo@dundee.ac.uk

Professor Graeme Martin

Carnegie Building
University of Dundee
Nethergate
Dundee
DD1 4HN

G.Martin@dundee.ac.uk

Dr Ian Robson

Carnegie Building
University of Dundee
Nethergate
Dundee
DD1 4HN

I.Robson@dundee.ac.uk

The University Research Ethics Committee of the University of Dundee has reviewed and approved this research study.

Appendix 3-3.- Informed Consent Form

TITLE OF PROJECT: STRATEGIC ALLIANCES IN THE ENERGY SECTOR, 'UNDERSTANDING PERFORMANCE AMONG STRATEGIC ALLIANCES IN THE ENERGY SECTOR FROM THE PERSPECTIVE OF PROCESS THEORIES OF CHANGE'

Strategic alliances are a method of collaboration that is becoming more popular. However, the success rate for such collaborations is not high. Moreover the reasons for relative failure are not well understood, particularly in the energy sector. The purpose of this research is to understand factors related to performance among strategic alliances in the energy sector by collecting the experiences and perspectives of managers and other core employees in developing strategic alliances in this sector.

I have been given a copy of the research project on 'Strategic Alliances in the Energy Sector' information sheet, explaining this research project and its different types it is carrying out, and giving a named contact for the work going on in my area.

I understand the purpose of the research is to gain an understanding of the performance of strategic alliances in the energy sector.

I am willing to participate in: an interview / a focus group (Circle as appropriate)

I understand that the purpose of the interview is to gain a in depth understanding of my experience, positive and negative about participating in strategic alliances, whereas the focus groups would be used to follow up on key themes arising from individual interviews concerning strategic alliances. The focus group would be developed among members of my organization, and could have as many as 8 participants.

I understand that participation on this research is voluntary and that I would not receive any remuneration or reward.

I understand that I will not be identified in any reports, papers or other documents produced in relation to this project. I understand that if I wish, I can take part in this research but not be identified by name.

I understand that I can withdraw my consent to participate at any time.

I understand that I will be given information about the outcomes of the project on request from the researchers who invited me to participate.

In particular, I understand that the researcher will take notes of the meetings, and will audio tape them, but the tapes will be used only to confirm the notes taken. A Transcription Service use by the School would make the transcriptions. Notes, tapes and transcriptions will be stored securely in password-protected computer, and will be destroyed after the conclusion of the project.

I understand that the researcher might use extracts of the interviews in publications or in his thesis on the basis that no individual will be identified in the text. Therefore:

I agree ☐ or disagree ☐ on this. (tick as appropriate)

I agree to participate in this basis, and I understand that this consent form will be stored securely and separately from the tapes and notes of the meetings I attend.

By signing below you are agreeing that you have read and understood the Participant Information Sheet and that you agree to take part in this research study.

Participant's name & signature

Date

Joaquin Rafael Figueroa Gallardo
Signature of person obtaining consent

Appendix 3-4.- Interview briefing

TITLE OF PROJECT:

STRATEGIC ALLIANCES IN THE ENERGY SECTOR; ‘UNDERSTANDING PERFORMANCE AMONG STRATEGIC ALLIANCES IN THE ENERGY SECTOR FROM THE PERSPECTIVE OF PROCESS THEORIES OF CHANGE’

Thank you for showing an interest in this project.

The interview would take the form of a semi-structured session (between 1-2 hours). The most important aspect of the interview is to have your opinion, understanding and experience in the development of Strategic Alliances, without bias from other inputs being gathered for the project, or from existing theory in this area. Questions that could be addressed include the following:

- What is the meaning of strategic alliance to you?
- Which are the motives to get into a strategic alliance?
- Are there any external constraints that influence their perspective?
- How are decisions made to enter or not into a strategic alliance?
- Which are the main characteristics for selecting a partner?
- How do you manage an alliance portfolio?
- How to measure performance of a strategic alliance?
- What are the main issues/problems/risks with strategic alliances?
- Which are the critical factors while developing a strategic alliance?
- Which factors are the main determinants of success or failure?
- How can executives and managers influence these factors?
- How do you see the future for strategic alliances in the energy sector?

If during the interview you can mention some examples/cases would be highly beneficial.

Once again, thanks for your interest in this project.

Appendix 3-5.- University of Dundee Research Ethics Committee approval



School of Psychology

University of Dundee Research Ethics Committee

University of Dundee,
Dundee,
DD1 4HN.

24 October 2013

Dear Mr Gallardo,

Application Number: UREC 13128

Title: Strategic Alliances in the Energy Sector: Understanding performance among strategic alliances in the energy sector from the perspective of process theories of change

Your application has been reviewed by the University Research Ethics Committee, and there are no ethical concerns with the proposal. The Committee makes a judgement in terms of the Guidelines issued by the British Psychology Society (Code of Conduct, 2006; Ethical Principles for Conducting Research with Human Participants, 2009), and the Medical Research Council Ethics Guide on Medical Research Involving Children, 2004). Any approval given is on the basis that you undertake to follow the relevant Guidelines.

I am pleased to confirm that the above application has been formally approved.

Yours sincerely,

Dr Astrid Schloerscheidt
Chair, University of Dundee Research Ethics Committee